





## Original Correspondence.

## PRACTICAL IRON MANUFACTURE.

SIR,—My attention has been called to a reprint of an able article on this subject from the "Iron Trade Review," which appeared in the *Mining Journal* of April 27. This paper contains much valuable information, more particularly on the composition of the various substances used for fettling puddling-furnaces. The writer thoroughly understands the subject on which he writes, and evidently not only understands the practical details of the process of puddling, but the chemistry of the process. I write now not to correct any misstatement of the writer of this paper, but to point out a prejudice operating against my interests, arising from the adoption of the term "Blue Billy," as a generic designation, instead of, with the particular limitation applied to it by "J. A. J.," a residue from pyrites used in manufacturing sulphuric acid. The analysis given can only refer to the residue left by burning the pyrites from the coal measures, or from Belgian or Westphalian pyrites, as all Spanish or Portuguese pyrites leave a residue containing more or less copper. About six years ago, when I commenced to treat the residual burnt ores produced from Spanish and Portuguese pyrites for copper, and aimed at producing a wonderfully pure peroxide of iron, free from sulphur, in a state of coarse powder, and with a very low percentage of silica, I found that the substance I proposed to sell as "purple ore" was immediately nicknamed by the Staffordshire puddlers "Blue Billy" (and that name in some districts remains with it yet), though no more resembling it in physical appearance or chemical composition than chalk resembles cheese, as the following analysis will show:—

	Purple ore	Hematite.
Peroxide of iron .....	69.98	96.30
Protoxide of iron .....	—	0.64
Protoxide of manganese ..	Trace.	—
Alumina .....	0.90	—
Lime .....	2.65	0.54
Magnesia .....	0.33	Trace.
Carbonic acid .....	—	0.35
Silica .....	5.24	1.68
Sulphur .....	4.61	0.03
Phosphoric acid .....	None.	0.11
Copper .....	—	—
Chloride of sodium .....	—	0.32
Molsture .....	16.16	12.25
Total .....	100.36	99.94
Metallic iron .....	58.42	68.18
When dry .....	—	55.90

Despite this prejudice, the British Metal Extracting Company, the Staffordshire Copper Company, and the Tyne Metal Extracting Company have now sold nearly 100,000 tons, principally for fettling, and no works with intelligent managers or workmen, who have once tried it, have ever given it up. The analysis will show that it is eminently suitable for the purposes of washing and cleansing the iron sponge, and contains a very high percentage of pure iron, and cannot fail, when properly used, to produce a larger yield and better quality of iron.—*Glasgow, May 22.* WILLIAM HENDERSON.

## A VISIT TO THE PARIS EXHIBITION—No. I.

SIR,—Details are only interesting to the few, and generalities too frequently teach nothing, so that I shall aim at pursuing a middle course, in giving some notion of what may be seen at this great world-show, and seen to advantage by those whose occupations in life lead them to a weekly perusal of the pages of the *Mining Journal*.

Group 5, class 40, and group 6, class 47, are where we ought to find the objects, as per catalogue, in which we are mostly interested. The former is under the heading of "Mining and Metallurgy," and the latter, "The Apparatus and Processes of the Arts of Mining and Metallurgy." Group 5, class 46, "Chemical Products," deserves also our attention. You may imagine that with catalogue in hand, every object numbered, and the arrangement and classification sufficiently complete to satisfy even the orderly mind of an accomplished German, that you have nothing to do but to walk through the numbers consecutively, and everything will turn up just as the catalogue arrangement leads you to expect; but, alas! arranging and classifying on paper is easy work indeed to what following out this arrangement by placing the objects, happens to be. If you require an illustration of this truth, then go to the Paris Exhibition, and you will there find it, but not so much, perhaps, to your satisfaction as to your annoyance and inconvenience. You have carefully examined No. 29, and naturally you conclude that No. 30 must follow, but after allowing your eye to wander as far as it can reach—and, unfortunately, it cannot reach far in the Exhibition building—you fail to detect the whereabouts of 30; and, possibly, days after you may stumble upon it in some outhouse, sur le Grand Boulevard, or Allée de something or another, dans le Jardin de l'Exposition.

It is an easy thing to find fault; and surely a goodly number must have found out how very easy this is in relation to the Paris Exhibition. "Our own correspondents" to les Journaux de Grande Bretagne et d'Irlande have dosed us to the full with complaints; and Transatlantic steamers have carried to Brother Jonathan the like evil dictum, causing, no doubt, in a great measure, the marvellous continuity of misfortune which to-day acts as an anchorage cable to our unlucky great ship; and causing, also, to some extent, a delay in the great influx of sovereigns and dollars, for which Avarice invariably, under similar circumstances in every country, stands with outstretched hand.

Mais pour nous c'est indifférent et sans conséquence, unless we meditate a long stay in Paris. We are more inclined to look at the bright side of things, and however contradictory it may appear, we are, nevertheless, doing so in gazing upon that immense column of coal from Nova Scotia, about 37 feet high, with its associated, comparatively, smaller columns, all representing respectively the thickness of coal seams. On whatever side we look upon these rectangular columns, we are looking on a black side; but then the reflection, not of the coal itself, but of one's own thoughts as to the practical value of such a deposit of black diamonds, is a bright one. These les colonnes de charbon de terre du Nova Scotia stand in the grounds a little to the right of the grand avenue, as you enter from le Pont d'Iéna; and as we look upon them with a kind of admiration, we are informed that some three or four other sets of columns of the kind have been erected at other exhibitions, and it is thought that this will be the last. Whether our informant meant that this Paris Exhibition is to be the last of international exhibitions, and that the end of time is near, we know not, but scarcely suspect that this was intended. Similar columns from our South Staffordshire mines might have been placed in the company of these New Scotland blacks without losing much in comparative stature by contrast. Apart altogether from commercial questions, what labyrinth of wonder and amazement we are led into by contemplating these representatives of such gigantic coal deposits? Whence came all the vegetation, and how deposited? Human thought is lost in the maze of estimating time by myriads, required to bring about such astonishing results. We have before us, in these black pillars, a volume full of chapters, or divided by epochs, which men pretend to understand, and attempt to explain; but after the most erudite dissertation of the geology thereof, we still feel our ignorance, and the littleness of the knowledge we have; and in this mood of mind we turn ourselves in the direction of an entrance to the treasures of art and science contained within le grand maison de l'Exposition.

We shall for the present pass through le Grande Galerie des Machines, and enter le Galerie des Matières Premières. Here we are met with the well-known Aberdare steam coal, in well-hewn blocks, placed in neatly got-up cases. The Aberdare Coal Company, the Blaenavon Company, Bodrington Coal Company, Nixon's Navigation, the Copper Miners in England (Governor and Company), &c., are all represented. This Welsh steam coal is, after all, a unique steam fuel. Even at an International Exhibition it shows forth an individuality. Once having seen a block of this coal, you know it again. Seeing it thousands of miles away from home, stored at some coaling station for a steam navy, it seems to say to one—"We come from the Aberdare Valley." Its rough face and queer fracture, and stubborn resistance to the force of blows, are its peculiar features out of the fire-box. When performing duty as a heat producer, the vigour and smokeless manner in which it does its work is also a notable characteristic. It was, no doubt, at one time—indeed, far away in the past—as dirty, sooty a coal as any of its relatives; and we are

instinctively led to ask ourselves what has become of its smoke? By what agency has it acquired its greater amount of fixed carbon? There is another connection of the family (anthracite), impressing these queries still more forcibly upon us. Representatives of them are from Pennsylvania, America, and from the west of Aberdare Valley, in Pembrokeshire. One would like to have a clear, intelligible history of the family. Their autobiographies are not very readable, and we turn away from them as from a difficult passage in an old Latin author, wishing we knew more without the hard work of poring and penetrating.

## ANSELL'S FIRE-DAMP INDICATOR.

SIR,—To reply to each of the queries of "A Colliery Viewer" would be to enter upon a controversy for which he professes himself unwilling, and for which I confess I have neither the inclination nor the time. I have never said or implied that my instruments "are not reliable"—this, notwithstanding my Parliamentary evidence, is much misinterpreted. I once more invite "A Colliery Viewer" to tell me the circumstances under which my instrument was found "not reliable," when used in accordance with the directions. I also invite him to point out one fault or difficulty in its use, the existence of which I have omitted to state and explain. If he will descend to facts, and on them found opinions, I shall feel obliged.

Royal Mint, May 20.

GEORGE F. ANSELL.

## PUMPS, ENGINES, &amp;c.

SIR,—I am about to open a mine 350 yards deep; the pits are sunk, and it is estimated a pump 20 in. in diameter, working 8-ft. stroke, 10 strokes per minute, will pump all the water. I shall want an engine and pumps to do this. Should any of your readers have such on hand I will thank them to inform me the lowest price at which they will deliver it and put it to work within 50 miles of Birmingham, describing how and where it may be seen.

My principal reason, however, for writing is in consequence of an idea which has struck me that some new invention may be known of less cost, and workable with greater economy; if so, I shall be glad to obtain the necessary particulars. If you will be pleased to call the attention of your readers to this subject I shall be obliged.

R. N. P. T.

N.B.—If any engineer will favour me with the cost of a new engine, pipes, pumps, &c., put to work and warranted for a reasonable time, I will give him a fair chance. Some will, perhaps, advise a bull-engine, and others a condensing-engine: advice and price is what I seek.

## SILICATE OF MANGANESE.

SIR,—Mr. Mushet in his letter, published in the *Mining Journal* of May 6, says, "Recently a discovery has been made of silicate of manganese, a mineral more valuable as an iron improver than even spathose iron ore." Now, I presume that Mr. Mushet did not come to this conclusion without having experimented with this mineral, as he writes so positively upon its value; if, then, he will further say how and in what quantity the silicate of manganese should be used, he will, I have no doubt, oblige many of your readers.

HEMATITE.

## MINING PROSPECTS IN BRAZIL—No. II.

SIR,—I availed of your valuable columns in the *Journal* of June 9, 1866, to treat in a general way on the auriferous value of the Cordillera of Ouro Preto. It is gratifying to me that experience is daily more and more corroborating the correctness of the anticipations relative to the workings of the Don Pedro North del Rey and Anglo-Brazilian Mining Companies. The object I had in view was, on the faith of the correctness of the predictions, to hold out the expectation of finding many points in this Cordillera worthy of the same development. I now propose to treat, on sectional consideration, of the site of the Padre Faria property, a place within the municipality of Ouro Preto, capital of the province of Minas Geraes.

The layers of large (indurated clay, I presume) schist, jacotinga, and, in general, what I understand miners call the "country," all dip to the south. The gold found by the explorers in olden times in the Californian epoch, thus to speak, of Minas Geraes was taken from the beds of jacotinga and other soft material. In paper No. I. it was considered that from the hard rock being more or less auriferous, and from the existence in various points of the Cordillera of upheavals of the hard rock, they were eruptions or effervescences diffused over the Cordillera of these upheavals, and afterwards by aqueous influence, in layers of uncertain thickness—sometimes in narrow strips, sometimes in a large body. On looking at the eastern cliff of the Talho Alberto workings, there is still to be seen a layer of jacotinga about 6 or 7 in. thick, and which, from the extensive Talho Alberto workings there, we must suppose to have expanded into a large body. On the eastern side of the upheaval, on looking at the drifts run in the mountain low down, they appear to have been driven through a body of jacotinga, or something that resembles it very much. I am of opinion that if the expense were gone to of timbering the ground there is a good deal of auriferous jacotinga to be met with, left by the old people, from their inability to take it all away.

In Padre Faria one of these upheavals exists, and I believe that about 500 yards to the west there is another, in the Moreira property, but I can speak more positively on the one of Padre Faria. It is met with on the surface in the Tassara property; it is there 3 yards or 4 yards wide, and crops out for a considerable distance in a north-north-east direction. The first look at it does not indicate it to be of the same kind of stone as that found beneath, at the bottom of the valley. It is very rich stone, but is not handy for a large force of men to work on it.

At the bottom of the valley the vein-stone is found to be dipping north, in alternations, the intermediate spaces being schist or killas of about 2 ft. thick. The vein-stone is quartz and felspar, interlaced with oxide of iron, phosphate of iron, peroxide of manganese, arsenical pyrites and ditto decomposed, and also a stone called by the Brazilians Pedra Mulatta. These alternations open and shut, then re-open and re-shut. Their greatest width that I am acquainted with is about 1½ foot, very rich stone, and worthy of having a separate spalling-floor. A layer of flagstone comes in, cutting them right through, but on sinking on this flagstone about 2 ft. the vein-stone is again come into. An experienced English miner, on seeing the cabeceira (end), said that it was a champion lode. An experienced Brazilian miner, who from childhood has worked in the mines, said it was the formacao mestre. As I am not a miner, the idea to my mind is that these alternations are principal offshoots from some main lode, which it may be conjectured cannot be far off; and if an inference can be formed from the richness of these offshoots and the diffusion in the hard rock, in places where there is no upheavals, of little sprouts of veins not thicker than a hair, the conclusion seems natural that the main lode must be a very valuable one.

From the conical figure of the mountain, and judging from the height from the mine to the surface in the Tassara property, the width of the lode at the level of the mine, must be equal to that of the Morro Velho lode, belonging to the St. John del Rey Company.

The descent of the Marianna road to Marianna is very great, and with respect to the Padre Faria, if an horizontal line be drawn of 220 or 234 fathoms (where Padre Faria ends) from the mine, the perpendicular line down to the rivulet must be about 234 fathoms, by eye measure; at this point the river Funil, known in Marianna as the Rio de Carma, finds its outlet from a very high cascade—the Tombador—whither it has arrived from the bridge in Ouro Preto, denominated the Barra, from the perpendicular line being about 234 fathoms, is it not to be inferred that the upheaval I have mentioned can be come into at a great depth, and will be found of a very great width indeed?

Practical people inform me that the river Funil, at the level of the Tombador, will give a sufficient fall to work a series of stamps in the Padre Faria rivulet (the Corrego do Ujo).

There is also a stream coming down from the top of the Itacolumi Mountain, and which, by means of an aqueduct, can cross the river Funil at any height required, in a certain part of it where it runs in a steep and very narrow gorge of the mountain. I am informed that the Itacolumi stream referred to contains sufficient water to work in the dry season a 36-head stamps.

That Padre Faria was very rich is unquestionable. The historical

annals affirm this to have been the case: the existence of the numerous drifts running into the mountain tend to the same conclusion.

At the Talho Alberto workings referred to, it answers the purpose of the Brazilian owner to go pottering about in search of the little sprouts of branches which I have mentioned, of the thickness of a hair, on the exposed hard rock, and which sometimes turn out very well; he follows the Brazilian system, of bringing the stone down from the top of the mountain in carriages on the heads of workpeople.

That Padre Faria, if worked systematically on the points where the upheavals exist, will and must be rich seems to be a question not at all problematical, for quantity will be combined with quality; and that it will also be a very cheap mine to work is inferred from the topographical situation of it on the side of a hill, and affording great facilities to bring in adits at a great depth.

Ouro Preto, March 30.

## HISTORY OF MINING—No. III.

SIR,—In some recent letters of mine which appeared in your columns, the origin, antiquity, and early history of mining were discussed. So many letters have been addressed to me on this subject, that I will, with your permission, return to it. Few topics could be more suitable to your journal, or more interesting to a large number of your readers. In former letters I pointed out the fact that in the antediluvian world, and in the circle, or, at all events, the precincts of Paradise, precious metals existed, and that, as the first man was not a savage, but intelligent, and supernaturally endowed with a knowledge of the nature and relation of things around him, it was likely that he recognised the value of metallic substances, and had some foreknowledge of their future uses. In some letters addressed to me it has been maintained, that in order to procure any of the other metals, man in the primitive ages must have had iron, and that, therefore, iron must have been the first metal known to man, or, at all events, used by him. This does not appear to have been the case, as far as evidence is supplied to us by the relics of the past. Geological researches show that in various countries men used stone, flint, and bone, to procure timber for fuel, building, or other uses; to defend themselves against wild beasts, and against one another, and to conquer animals for food.

Frequently the harder woods were used, when stone, flint, or other hard substances were unavailable. But in many instances the metals lay upon the surface, and were easily separated from the soil or rock, and fashioned into rude implements. As far as history and tradition throw light upon the subject, the precious metals and iron, as copper was called, were known and appreciated long before iron was valued, if known. There is a striking illustration of this in the present age in New Mexico. In the last number of my "Guide to Investors" there is an article written by a gentleman familiar with all the mineral regions of North America, in which he uses the following language:—"It has been a matter of incredulity to the aborigines of New Mexico, more particularly in the Santa Fe district, make the bullets for their rifles of silver; it is, however, perfectly true, and it simply arises from the fact that they have no other mineral from which they can procure metal within hundreds of miles, so that lead would be to them more expensive. They have no means of importing it, whereas they take masses of the rocks with which they are surrounded, build a kind of furnace, and with the charcoal which they make, assisted by the alkali which is found in such quantities throughout the country, they very soon flux the ore, and when the fire is out they have in the sole of their furnace the metal required for use."

As the statements in the above paragraph are undoubtedly true, they prove irrefragably that the knowledge and use of iron as a preliminary to the possession of other metals, and to any progress in civilisation, was not indispensable, however important. In one of the letters addressed to me on this subject, my attention was called to the fact that Tubal Cain was designated the instructor of every artifice in brass and iron, and that he, being a son of Cain, the use of iron must have been known from the very beginning of the history of our race. Tubal Cain was not, however, the son of Cain, nor yet his grandson, nor even the eldest of his great grandsons; and when it is remembered that a marvellous longevity marked the antediluvian patriarchs, a long space of time would elapse between the birth of Cain and the mature age of one of his younger great grandsons; and that the earth, or that part of it whence men issued forth to people it, would be very populous. Tubal Cain was, probably, the first skilled artificer in brass and iron, the two metals named; but these and other metals may have been used in a rough way before. One thing is certain, that cities were built before any help to build them was obtained from copper or iron, made into skilfully constructed instruments, for the great grandfather of the artificer built the city of Enoch.

The word "instructor," which describes Tubal Cain in the English text, is one of vague import, and has been translated "whetter." At the period when he was thus distinguished man, according to the chronology of Archbishop Usher, had inherited the earth for, at the very least, 500 years. It is more than probable that the past really taken by Tubal Cain was to excel in what was known before, and so to excel as to become an authority for all men and many ages. The great antiquity of metal artifice does not prove that mining is so ancient, because, although metals might be obtained from surface mines, mining proper—the pursuit of the ore when deeply embedded—must have been subsequent to the discovery of surface iron, and the skilful construction from it of the requisite tools. Probably no deep mine was ever worked until after the deluge; how soon after that event the like occurred it would be impossible to prove; but conjecture is well supported by tradition in reckoning that the second process of peopling the earth was at an early stage marked by man's eager quest beneath the soil for the metallic treasures there deposited.

Gresham House, London.

THOMAS SPARGO.

## CARDIGANSHIRE LEAD MINING.

## FROM GOGINAN TO THE TOP OF PLYNIMMON.

SIR,—At a time when money is so plentiful and labourers abundant it may not be amiss to draw the attention of the public to this county. Were a few thousand pounds judiciously expended it might lead to the laying open of millions in value of lead and silver, as well as the employment of thousands of hands to work them for very many years to come. The attention of nearly all parties who have invested in this county has been chiefly devoted to mines which have been worked centuries ago, such as Cwmystwith, Old Darren, Cwm Erlyn, Goginan, Cwmystwith (now East Darren), Bronfryd, &c., whilst the ground to the east of them has been left untouched.

Some few months since, however, by accident a poor miner discovered a rich rib of lead ore in one of the brooks crossing the Plynlimmon range of mountains, which drew the attention of a few parties in the neighbourhood to it, and after a little time it was disposed of to a Birmingham company, under the management of Capt. James Richards, of the Devon Great Consols, who have opened out one of the richest, if not the richest mine in the whole county. This discovery was made at a distance of five miles from the Goginan Mine, and in a direct line, or nearly so, to the east of it, so that many persons seem to imagine it to be the Goginan lode; but, from its size and dip, I am inclined to believe it a lode south of Goginan. Be this, however, as it may, it is in very close proximity to it. The Goginan lode has been worked on about half-a-mile further east than the Goginan grant, and produced large quantities of rich silver-lead, from which point to the present Plynlimmon Mine is untouched and untried. The Cwm Erlyn lode, which, if the ground were level, would pass about half-a-mile to the north of Goginan Mine, the ground on this lode has not been touched east of Cwm Erlyn. We have, therefore, five miles of virgin ground on this lode for trial. The Cwm Erlyn lode, however, has never been tried out of the Cwmystwith grant, Cwmystwith, or East Darren, has never been tried out of the Cwmystwith grant, and should be about one mile north of the Plynlimmon Mine, or half-a-mile north of Cwm Erlyn lode. Here we have a distance of five miles again, all in virgin ground. Between these lodes, and close to the north and south, there are many others rich and productive, but as the three miles named—Goginan, Cwm Erlyn, and East Darren—have produced millions of pounds worth of silver-lead, it will be sufficient at present to point out the advantages for working on them to the east of the River Rheidol, which crosses midway between Goginan and the top of Plynlimmon, as the veins cross that river on entering the Plynlimmon range of mountains, at an elevation of from 800 to 1000 feet. If we were, therefore, to commence adit levels on the course of the lodes at the Rheidol river, we could then eastward, we should gain a back eventually of 250 fathoms, the Plynlimmon Mountain, where the lodes would cross, being nearly 1500 ft. higher than the river. The lodes, where seen in the Plynlimmon Mountain, are of the very finest description, being composed of gossan and lead to surface, and the advantages for working them cannot be surpassed—in fact, I can point out half-a-dozen properties that might each be effectually tried for 1000l., and it is difficult for a person to understand why for centuries past this place of ground has been left quiet, unless it is to prove the old saying that "there are mines for all ages," but surely these mines are for our own.

At a time when my fellow-countrymen are suffering from intense hardships, bordering almost on starvation, and thousands obliged to seek their bread in







near Bristol; it was ventilated without furnace power?—It is a well-conducted mine, but I do not think that workings more than a mile from the shaft should be ventilated without furnace-power, although when there are two shafts the natural ventilation is considerable.

By Mr. POWELL.—The reason we have more falls of roofs in my district than in others is that the latter possess a stronger classification.

Mr. POWELL.—Has it occurred to you that it would be an advantage to have a panel of arbitrators; that is, a list of persons agreed upon, from whom alone arbitrators can be chosen?—It has not; but an arbitrator ought to be a mining engineer, of whom there is an abundance, in order to understand the technicalities of the cases brought before him. It might be done, but I would prefer the owner and Inspector each to select one, and they to choose an umpire.

By General DENNE.—If you give the Inspectors too much power, you throw a great responsibility on the Government, as well as on them. An Inspector should not only be experienced and able, but he should be a gentleman.

By Mr. LIDDELL.—Such an accumulation of gas as I have described is, doubtless, the result of immense pressure going on for ages, and could not have resulted from want of ventilation in the workings. There is now in our district a growing opinion in favour of more shafts, and to defer to the views of the present day. I do not think our mode of working the best. It would be better to follow the Northern system, of commencing at the farthest point and working homewards, leaving everything that is laid behind them. That plan has been established in Lancashire for 60 years, and in Staffordshire and Shropshire for 100 years. In most cases in our district they do not drive out to the extreme boundary before they begin to draw coal. They cannot keep their hands off it. It involves a delay in the first instance, but there can be no question the Lancashire plan is the best.

Mr. KINNAIRD: You said the owners are more willing to defer to the views of the present day. Explain that?—I mean that formerly coalowners got the coal out whether it was safe to the men or not; now they see that, not only for the sake of humanity, it is more profitable to have a liberal outlay to keep the works in good order, and more economical in the long run.

Mr. KINNAIRD: Then legislation has tended to save life?—Most certainly. Mr. KINNAIRD: Then as knowledge increases precautionary enactments should be extended?—Yes; but it should be done gradually. I think it due to those who get their bread and make the fortunes of others by mining that they should be protected.

Mr. KINNAIRD: An increase of Inspectors would not hurt the workmen?—It would be an advantage to the men, and, probably, profitable also to the owners. Mr. LIDDELL: But the Home Office has now power to do that?—I believe so. By the CHAIRMAN.—As the mines get deeper and deeper the difficulty of new shafts becomes greater. By-and-bye we shall have to go down 1000 yards, but before then our knowledge will, no doubt, be greatly increased. There is a mine in Belgium which is now 1000 metres deep. I should not fear, with our present knowledge, to sink a shaft 1000 yards deep.

Mr. KINNAIRD: Would you extend legislative protection in the case of boys?—I would not go beyond 12. If you run up to 14 and 15 there will soon be no colliers at all, as they will get into other employments. Now boys at 10 may go down if they can read and write, and at 12 they can go down whether they can read or not. I would not let any go down till they are 12 years of age, and that would settle all the questions that are continually arising as to certificates of education, &c.

By Mr. LIDDELL.—In my district education does not make much progress, but there are plenty of schools. Nine out of ten cannot write.

By Mr. POWELL.—The schools are conveniently situated.

The committee then adjourned until Tuesday week.

## Meetings of Mining Companies.

### ROSSA GRANDE GOLD MINING COMPANY.

The second ordinary general meeting of shareholders was held at the London Tavern, Bishopsgate, on Tuesday.

Mr. GEORGE NOAKES, F.G.S. (managing director), in the chair.

The notice convening the meeting was read. The report of the directors stated that the Rossa Grande estates have been duly and legally conveyed to the company's trustees. Special arrangements were some time since made, whereby the directors were enabled to give Capt. Brokenshar permission to commence the preliminary works necessary for laying open the mines. Capt. Brokenshar has snatched the back of the lode in the "second formation," laying bare a considerable extent of ore ground for stripping. He has also driven the adit level home to the point of intersection with the lode in the "first formation," thereby putting the mine in a position for the immediate raising of ore; he has likewise completed the erection of the first 12-head stamps, and brought the water-courses to bear upon them, so that the mines can now be worked for immediate returns. Considering the favourable district in which these mines are situated, the profits surrounding mines are now making, and bearing in mind the results of recent explorations by Capt. Brokenshar, who, in addition to the considerable extent of ore ground for stripping, has also discovered other promising characters, the directors feel justified in anticipating, in the opinion of Capt. Thomas Treloar, a report (upon which the company was founded), that the Rossa Grande property, under a due course of development, will become remuneratively productive.

The CHAIRMAN said that they were again met according to the constitution of the company, but for his part he should be exceedingly glad if these meetings were held at least twice a year, so that the shareholders might be more frequently acquainted with the company's affairs. Unfortunately—more particularly in mining companies—rumours very often adverse to the interests of the company, and adverse to the directors, were promulgated without the opportunity of the shareholders being informed whether those rumours were true or not, and, therefore, it was upon that principle that the officers the directors met the shareholders the better. (Hear, hear.) They had passed through a long period of very great anxiety, which none could have felt more than the directors, upon whom the responsibility rested of conducting the company's affairs, and he might say that every member of the board had endeavoured throughout to protect the shareholders' interests to the best of his power. As stated in the report, there had been great disadvantages from the long delay which had taken place in bringing the works of the mines into active operation, but the directors felt that until all difficulties had been cleared away of a clear title to the estate no portion of the purchase-money should be paid. All those difficulties had been overcome, and the company now possessed a clear title to the property, which no one could gainsay. Although to accomplish this had taken a long period, the whole of the time had not been lost, for in the interval a great deal of most important preliminary work had been accomplished. Capt. Brokenshar had been able during that period to take measures for the future working of the mine—and the directors were told by the vendor of the property (who he was sorry was not present) that the driving of the adit level took five years, and which had been driven by the present company for upwards of 20 fms., to a point which was of the utmost importance—its results, at all events, might be such as to make the property in a very short time, he would say all that had been stated, because that could only be proved by larger developments, but it would possibly prove this—that the lode to be worked upon was highly productive. The proprietor of the mine had also informed the board of another important feature, which was this—that they were unable by mule-power to pump the water, and consequently a "rise" was put up, so as to enable them to develop it with greater facility. They reached the lode and worked upon it, and it was very rich. Subsequently family disputes took place, which caused the suspension of operations at the mine, when from neglect the shaft ran together. They all knew the difficulty of clearing a work of that kind, more particularly after it had remained in that state for a number of years; but Capt. Brokenshar had not particularly confined operations to the clearing out of the rise, which he did up to a certain point, when he proceeded to drive the adit level. In doing so he passed two lodes, for they were more than branches, although neither was the main lode, one of which contained gold visible to the naked eye, and Capt. Brokenshar found by dialling that in about 5 fms. driving the main lode should be struck; and he was the more certain of being able to do this from having cleared away some brushwood, and discovered the old workings, which had enabled him to dial with more accuracy the underlie of the lode. Therefore, it was possible that by the next mail he might be received that the main lode had been cut at the deep adit level; but shareholders should not be disappointed if it took a little longer time, nor if just at the point cut the lode was unproductive. He (the Chairman) should have told them that Capt. Brokenshar was in a position to immediately commence operations when he had sufficient water-power to commence with. Capt. Brokenshar had done more than that, for in what was called by Capt. Treloar "the second formation," he had uncapped the back of the lode, laying bare a considerable amount of ore ground for stripping. From these facts it would be seen that the mine was now in a position to commence working for available returns. He (the Chairman) knew that he was called a "wet blanket," but it was impossible to tell what results might be realised, he, however, would not have the shareholders disappointed if, as he had already said, the lode was not cut productive, because he dare say there were many present sufficiently acquainted with mining to know that all lodes were liable to fluctuations in value, being at one point very rich, and at another very poor. They were told upon excellent authority that the lode had been proved to be rich; but there was another feature which ought to increase their confidence in this respect, which was the report of Capt. Thomas Treloar. It was upon his report that this company was formed, and they saw the results that were following his working—the results following his predictions and his judgment, as testified in the St. John's del Rey, the Don Pedro, and the Anglo-Brazilian Mines. It was not that Capt. Treloar put the gold, but he was able to judge from the character of the ground that the indications were such that, probably, the lodes would be most productive. When he (the Chairman) looked at Capt. Treloar's report upon the Rossa Grande Mine when the company was placed before the public, and compared it with his report upon the other mines which he had reported upon at the same time, he was astonished to read the strength of language employed, and the decided opinions expressed much stronger than in the reports upon those mines that had been worked under his judgment, and had become so productive. Therefore, he thought that there was a *prima facie* reason that they should have confidence in the future working of the Rossa Grande. (Hear.) He had already stated that the mine was now in a position to commence working for available returns, and as far as could be seen there seemed reason to believe that in two months from this time small returns would be made, which he hoped would increase month by month. He need not tell the shareholders that the board of directors in London could not work mines 5000 miles away, but that it depended upon the management there, as to its honesty and integrity, whether the property was successful or otherwise. He (the Chairman) must say that in all the mines he had been, and still was, connected with, in no instance had he had such satisfaction in the correspondence as in that from the Rossa Grande Mine. (Hear, hear.) He had no doubt it would be satisfactory to the shareholders to know the financial position of the company, and before proceeding to state it he would mention that the expenses had been kept as low as possible consistent with the working of the establishment. The capital available to be called up would leave after payment of the purchase of the property and every other liability to this day the sum of £5,000 to work the property. The position of the company, therefore, is strong enough, and he had no idea that anything like this amount would be required for the development of the property. Looking at the prospect of the mine, and at the increasing prosperity of the surrounding mines,

many of which were not known to the English public, but looking at the results of the St. John del Rey and the Don Pedro and Anglo-Brazilian Mines, which were now creating such sensation, he thought they had at least most encouraging features to go upon. (Hear, hear.) He then moved that the report and balance-sheet be received and adopted.

The motion adopting the report was, after a short discussion, put and carried unanimously. Mr. C. W. White was re-elected director.

The CHAIRMAN said he had a great deal of pleasure in submitting the next resolution. He had been working this company since its formation, and, although his colleagues were most excellent men of business, and worked harmoniously together, each had long felt it would be very desirable if they could obtain, not only an accession of new blood upon the board, but at the same time gentlemen who, by their influence and position as mining men, would strengthen the present direction. The gentleman whom he was about to propose was one upon whom the sun seemed to shine in its zenith, and he (the Chairman) was sure they would all like to get into that beam, and realise the same prosperous results. The gentleman to whom he referred was Mr. Henry Haymen, whom he had much pleasure in proposing should be elected to a seat at the board. Mr. Haymen was the Chairman of the Don Pedro and the Anglo-Brazilian Companies. (Hear, hear.)

Mr. TUCKER seconded the proposition. He had known Mr. Haymen for many years, and he was satisfied the meeting could not possibly do better than to elect him to a seat at the board.

The motion proposing Mr. Henry Haymen was unanimously elected a director. The CHAIRMAN said he had next to propose that Mr. R. Hesket, one of Mr. Haymen's colleagues, be also elected a director. Although Mr. Haymen was a tower of strength in himself, by adding another director from these successful companies, with which he was so closely identified, to the Rossa Grande board, it would, no doubt, be satisfactory to the shareholders and to the public at large. The resolution being duly seconded, was put and carried.

Messrs. Cash and Edwards were reappointed auditors. It was agreed that all general meetings in future should be held yearly.

A vote of thanks to the Chairman and directors terminated the meeting.

### MARIQUITA MINING COMPANY (LIMITED).

The first general meeting of shareholders was held at the London Tavern, Bishopsgate, on Monday.—Mr. R. A. ROUTH in the chair.

Mr. C. O. ROGERS (secretary) read the notice convening the meeting.

The CHAIRMAN said he had the honour, upon the present occasion, to present the first annual report of the Mariquita Mining Company (Limited); but although it was the first report of this company, he thought it was not the first time he had had the pleasure of addressing most of those present. With the permission of the meeting, he would read some extracts from that report, with the view of bringing before the shareholders the exact position of their property. He would, in the first place, direct attention to the constitution of the company. As stated in the report, it was formed for the purpose of purchasing and working gold and silver mines in the Republic of the United States of Colombia (late New Granada)—the establishments of Santa Ana, Marmato, and Aguas Claras, formerly belonging to the Mariquita and New Granada Mining Company. Possession was taken of these several properties with all the assets upon them—lands, buildings, dwelling-houses, machinery, stores, and materials—as and from Feb. 1, 1866, and subject to all liabilities at that date; and the directors would have been glad if they could have reported more successful results. Impediments had occurred, more especially in working the mine of Santa Ana, which have diminished the returns, and created considerable delay; but nothing had happened to alter the conviction which is felt of the extent of this important deposit of mineral. The quantity of rough ore raised at the Santa Ana Mine between Feb. 1, 1866, and Jan. 31, 1867, had been 2485 tons; the quantity of concentrated or dressed ore proceeding therefrom had been 628 tons, and the quantity of fine silver produced 58,278 ozs., showing an average of 93 ozs. 5 dwts. of fine silver per ton. This production is considerably below that of the preceding years, and there was reason to hope, therefore, for its improvement. Still a price of 93 ozs. of fine silver per ton equal to £24, was a large produce for silver ores, and greatly exceeding per ton that of the mines of Mexico, which have paid large dividends to their owners. The ores of the mine of Valencia, which paid in past years large sums in dividends to its owners, did not average more than 32 ozs. per ton. The depth to which the Santa Ana Mine is worked is not above a sixth part of the depth of the mine just referred to. Of course, the important question for the shareholders to determine was as to whether the indications justified a further expenditure of capital. Upon this point the shareholders had been informed that an important work of exploration had been for some time past in operation; a cross-cut had been driven on the lode at the 70 to cut a western lode, which was known to exist in that direction. This had now been driven upwards of 60 fms., and it was confidently expected that the lode would be cut in 4 or 5 fms. more. Should this be the case, the company would then have a fresh source of supply open, which would enable them to be more independent of the bottom stopes, and they can then proceed with the important work of continuing the sinking of the new shaft to the 130, by which means this part of the mine could be worked with much more economy and freedom from delay. What was urgently required at Santa Ana was the extension of the underground workings, to lay open fresh sources of supply of mineral by attacking the lode at new points. The total cost of the Santa Ana Mine from Feb. 1, 1866, to Jan. 31, 1867, was £24,701, and the total returns for the same period were £6,474. The produce of returns was suspended for three months owing to a very serious accident which occurred in the month of August to the engine wheel at the shaft, which necessitated the entire stoppage of the raising of mineral for the time. The second point to which he would direct attention was to the Marmato Mines. It had been seen that these mines had given during the year ending January last the following result:—16,067 tons of rough ore were raised, and 17,484 tons stamped, including ore on hand at the commencement of the year. The total produce of gold and silver (including purchased gold) had been—fine gold, 5319 ozs.; and fine silver, 3235 ozs., being 5 dwts. 5 grs. per ton. Of the above the quantity obtained by purchase was 759 ozs. The cost had amounted to £122,795, and the returns to £127,123, showing a profit of £14,328. The returns for the first four months of the year, say February to May, were £36,020; the second four months, from June to September, £43,327; and the third four months, from October to January, £27,774. The produce for the first four months, per ton, was 4 dwts. 13 grs.; for the second four months, 5 dwts. 8 grs.; and for the third four months, 5 dwts. 18 grs. It was satisfactory to see the rate of produce thus gradually increasing, but it was still a low rate of yield. The yield of 1865 was 5 dwts. 16 grs. per ton; and that of 1864, 6 dwts. 7 grs. per ton. The next point was the Aguas Claras Mine. They knew that the stamping-mill went to work on March 14, and that regular returns were now expected from this property to an appreciable extent. The general superintendent described the width of the lode to be 12 ft. 12 in., of good soapstone, and from 10 to 12 ft. down to the quartz, and as appears, and being intersected in all directions by branches of solid argenteous galena and blende. Assays of the general sample of the lode had given results varying from 50 to 250 ozs. per ton of fine silver; picked specimens had yielded about 1000 ozs. per ton, and the dressed ore could easily be brought to the standard of 300 ozs. The back of the lode had been traced for about 60 fms., and did not vary in width or general appearance in that distance. The mine agents state their opinion to be that already sufficient ore ground was laid open to ensure the full occupation for two or three years of the reduction works. It had been seen that the amount of ore raised from the lode was 28 tons, containing, by assay, 3249 ozs. 11 dwts. of fine silver; and from the No. 2 level, 20 tons, containing, by assay, 3201 ozs. 6 dwts. of fine silver, making a total of 6450 ozs. 17 dwts. The board would be very sorry to encourage any exaggerated expectations of the result to be expected from the working of this mine, but with the facts before them they could not help feeling a considerable degree of confidence in the future of this mine. The total outlay on the mine and reduction works for the year ending Jan. 31 had been £46,800, forming a heavy but unavoidable drain upon the company's finances, which, however, would be met by the stock of the mine, and the further extraction which will now be regularly followed up. The following appeared to be the present position of the three establishments as to the monthly profit and loss:—At Santa Ana the expenditure in February exceeded the returns by £1278; at Marmato the returns exceeded the expenditure in the month of February by £1993; and Aguas Claras was now yielding a surplus, and it was not unreasonable to estimate a return of income over expenditure from this mine, when the reduction works are in full operation, of £5000 per month; there should be, therefore, a surplus of returns over cost of the three establishments of £5715, very small improvement in the rate of produce per ton of the ore of Santa Ana would cause the present deficiency at that mine to disappear, and the opening out of new ground ought largely to increase the returns from this mine—for the latter object, time was doubtless required. The shareholders were aware that the present company was constituted upon this basis—to pay the old company in money and shares the sum of 79,495, and at the time the arrangement was made it was calculated to issue 114,176 shares of 10 each, with 10s. credited as paid. If the whole of those 114,176 shares had been taken up, the present financial position of the company would have been exceedingly good, but instead of the whole only 83,390 shares had been taken up, and the consequence was the calls came heavily upon them, the large shareholders, who had supplied the capital for the purposes of the new company. The first 20,000, paid had to be handed over to the liquidators as part payment for the mines, and there was still 14,568, the balance of the purchase-money due. Although it fell very hard upon those who had taken the shares, yet it was to be remembered that those who had not gone on with the present company had forfeited all their right to an interest in the valuable property which the company possessed; and, therefore, if the present capital should bring the undertaking into a profitable state those who had taken the shares would reap the benefit the others had abandoned. It was supposed when the present company was formed that it would come into a state of immediate profit; but if the facts submitted in the report were looked at, it would be seen that two causes had militated against that result being realised—the first was, that for a certain number of months, owing to an accident, they were altogether prevented from raising ore; and the second cause was a material reduction in the "ley" of the ore that was obtained, the difference amounting to nearly 22,000 ozs., which, taking the "ley" of the previous year, would have given a considerable amount of profit. Of course, it became a serious question as to whether that reduction in the produce of the ore was likely to continue; yet from the appearance of the lode, there was every reason to suppose the ore would in a short time be as rich as heretofore. In the 70 they would shortly reach the lode which had given such large results, and from which they hoped to get a further supply of mineral; the sinking of the shaft would be continued, and the cost of extraction would be very much reduced. Looking at all the circumstances in connection with this exceedingly valuable property, there seemed every ground for believing that ultimately it would produce the results anticipated. As to the Marmato, that had exceeded their anticipations, having already given a profit, and there was every reason to believe it would continue to turn out well. As to the Aguas Claras, its value was corroborated by all who had seen it—it was a large mass of ore, that could easily be worked by means of adits driven into the side of the mountain. It was not without a great deal of anxiety and care that the board sanctioned the expenditure they did, amounting to 9000, and they considered it would be an injustice to the shareholders if they did not erect works for the purpose of reducing the ore, and bringing it into a marketable condition. He need hardly say that in carrying out a company of this magnitude there had been a great many difficulties, and it was not without a great deal of anxiety and care that the board sanctioned the expenditure they did, amounting to 9000, and they considered it would be an injustice to the shareholders if they did not erect works for the purpose of reducing the ore, and bringing it into a marketable condition. 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still able to show that only a small loss had been sustained. As to the question of management, he must say the directors had not been very well satisfied with the management of the company. A new superintendent had been appointed at Santa Ana and also at Marmato. The superintendent at Santa Ana was a gentleman of very great ability, and they had every reason to be satisfied with him; and at Marmato they had appointed a son of one of the directors, who expressed a belief that by the arrangements now made the whole of the ore would be carried out with greater economy, and a hope, as a large shareholder, that at the next general meeting they would assemble under a very different aspect of affairs, he concluded by moving the adoption of the report.

Mr. SPENCER HERAPATH seconded the proposition. A SHAREHOLDER asked if Mr. Evan Hopkins had been consulted as to the position and prospects of the mines?—The CHAIRMAN said Mr. Hopkins had written his opinion, and the board hoped to have the benefit of his services as soon as his health improved. Mr. Hopkins expressed his opinion as follows:—

May 17.—Great credit is due to the Marmato Mine agents for the manner in which they have lately prosecuted the exploring works at Aguas Claras. They have not only attended and obeyed the instructions sent to them to discontinue the driftages in the barren lodes below, and confine the explorations to the development of the bunch in the open cutting at the head of the ravine, but they have done the work in such a safe and systematic manner as to lay open the ground sufficiently to produce about 50 tons of rich silver-lead ore. The character of this deposit of silver-lead ore is, by its economical and judicious mode of exploring, also shown, and thus the agents will have no difficulty whatever in laying open all the ore of value which may exist in that part of the property. It is a peculiar formation, therefore difficult to make any estimate of the value of the ore, but whatever that may be the mode which is now pursued will ensure them to extract the ore at a cheap rate. If the same caution and economical system be adopted at Santa Ana to lay open the San Juan part of La Marmata Pileto lodes, there could be no doubt but that they would lead to beneficial results.

Mr. De Pass (a director), in answer to a question, stated that the mine shares were in the liquidator's hands. The directors could not make a call upon those shares, because there was no one to represent them.

After a lengthy discussion, the report and the accounts were received and adopted. The retiring directors were re-elected, and Mr. John Dixon Forsyth was elected a member of the board.

A vote of thanks to the Chairman and directors terminated the proceedings.

### EAST DEL REY MINING COMPANY.

A special general meeting of shareholders was held at the London Tavern, on Tuesday.—Mr. CHARLES MORRIS in the chair.

The notice convening the meeting having been read, the circular letter explaining the basis upon which it is proposed to form the new company, and which had previously been circulated among the shareholders, was taken as read.

The CHAIRMAN said it would be in the recollection of shareholders that at the last meeting an adjournment was agreed upon for the purpose of obtaining a report from a gentleman then in Brazil—Mr. Furst—in order that they might the better be able to judge whether it was desirable to wind-up the company at once, or endeavour to raise more capital for the purpose of carrying on the operations. The report of Mr. Furst had been received, and he (the Chairman) thought everyone must have come to the conclusion that it would be very undesirable not to make some attempt to develop the Morro Sao Vito Mine. The indications, as explained by Mr. Furst, were of the most encouraging character. Shareholders would bear in mind that this mine had never been fairly tried by the present company, and Capt. Treloar, in his report, stated it would take about two years before the mine would be placed in a position to produce any results. It had no such workings, for, in the first place, the mine had been cleared a hard yard of ground was met with. That, however, had been passed through, and the lode was now being worked in the same manner as before. There could be no possible doubt as to the auriferous character of the lode, as that it presented strong indications of being very productive; some specimens had been assayed, with satisfactory results—indeed, its general characteristics were such as to induce the conclusion that the lode was of a good auriferous quality. The results that were being realised by the Don Pedro Mines, which although a few months since were yielding scarcely any profit at all, had during the month of March returned a profit of over £600, should encourage the shareholders of this company to develop their lode in the same manner, and being geologically as that from which the Don Pedro Mines were yielding such results. That was one of the strong points in their own property; it was satisfactory to know that it could be worked at a little expense, while in the meantime the quartz workings would, in all probability, produce something like a return to meet the expense of developing the jacutinga. He would now ask the shareholders to read the special resolution for the carrying out of the objects mentioned in the circular letter.

The SECRETARY read the resolution which embodied the winding-up of the present and the formation of a new company.

The CHAIRMAN moved that the resolution just read be adopted.—Mr. Lums seconded the proposition.

After some explanation from Mr. J. PHILLIPS with regard to the proposed of the mines, the question was put and the resolutions were carried unanimously.

A vote of thanks to the Chairman and directors terminated the proceedings.

### WHEEL CRELAKE MINING COMPANY.

The regular meeting of adventurers was held on April 12, when the accounts were presented, and charged up to the day of meeting. A call of 4s. per share was made to meet all liabilities, and render the financial position of the company unexceptionable. A meeting was called for May 17, for the special business of the company, when Mr. RICHARD DAVEY, M.P., took the chair, and there were present—Messrs. John Bayly, John Hay, T. Currie Gregory, C.E., F.G.S., J. Matthews, Thomas Nicholls, Francis R. Tomes, C. Gibson, and Capt. William Gregory, William Taylor, and William Skeewis. After the usual routine business, the agents' report having been read, it was moved by Mr. GREGORY, that the shares of the shareholders be given to the lessors of the central portion of the company's limits, for their liberally consenting to grant a new set, and provide in that all workings in their lands for two years from Lady-day last may be postponed, and afterwards to receive a moderate rental for the use of the facilities afforded by them for working in the lode of Bedford's lode adjoining, so long as the company confines its workings to the western portion of its estate; and, that it be remitted to the committee to nominate and arrange with the shareholders to act as lessees. It was then moved by Mr. BAYLY that Messrs. Richard Davey, M.P., W. Horton Davey, John Hay, Robert Kerr, John Bay, James Waterspoon, James Whyte, and G. Stewart Anderson be elected a committee of management, and that the meetings of the committee be held at the company's office at Glasgow, on June 11. It was moved by Mr. HAY that T. Currie Gregory, C.E., F.G.S., be the consulting engineer of the company, and that the thanks of the adventurers be given to Mr. Gregory for his services to the company. The thanks of the meeting were given to Mr. DAVEY for presiding on the present occasion, and for his services at all times.

Upwards of 11,000 out of 12,000 shares were represented at the meeting, and everything was done to the entire satisfaction of all. The agents' report shows the great and continued improvement in the mine, which, however, will be best proved by the sales of ore.

### CARDIGANSHIRE LEAD MINING COMPANY.

A general meeting of shareholders was held at the offices of the company, Allhallows Chambers, on Thursday.

Colonel JAMESON in the chair.

The SECRETARY read the notice convening the meeting.

The report stated that the outlay had been completed, and profits derived equal to 13 per cent. on the capital, but owing to the large sums due for calls, it would not be prudent to declare any dividend.

The CHAIRMAN, in moving the adoption of the report and accounts, stated that the company had laboured under great difficulty in getting capital for working the mines, so many of the shareholders having failed during the panic, and in consequence the mines had not been worked, as originally intended, so as to open up large quantities of ground at a time. The mines had been worked with the utmost economy, but not as fully as could have been wished; but he was happy to say, now that additional funds were forthcoming from the sale of the shares, which had been made of forfeited shares, an extra number of men had been employed, and he hoped that good results would follow.

Dr. ROGERS said that, although the directors were now going to pay a dividend, a dividend had been earned, and applied in adding much to the value of the property.—Major WELLER asked if the 21. 10s. per share remaining unpaid would be called up, because if not he had a friend whom he thought would like to take as many of the forfeited shares as he could get at 18s. per share?

The CHAIRMAN said the company would not call up the 21. 10s. final instalment, unless absolutely necessary, when all other resources have been exhausted, and that the shares in question must first be offered to the existing shareholders.

Dr. RYAN seconded the motion adopting the report and accounts, which was put, and carried unanimously.

The retiring directors were re-elected, and the auditor re-appointed.

The report of the agent was read, as follows:—

May 21.—Glan Rhedol Mine—North Lode: In the 40 cross-cut, north of the engine-shaft, we have not as yet cut into the main part of the lode; I fully expected we should have ere this, but from the appearance of the lode in the west sinking below the 30 it has gone down nearly perpendicular, while the shaft is sunk on its regular course, which has made the distance of the cross-cut in 40 much longer than I anticipated. The lode in the 30, west of the engine-shaft, is larger than usual, producing good work for lead ore and blende, and daily improving; I am of opinion we shall have a good bunch of ore in this end before long, as it is looking better than I have seen elsewhere the commencement of operations. We have resumed sinking the winze below the 30, the 40 cross-cut having watered this place; the ground is hard for exploring and slow for progress, the lode is worth 1½ ton of lead ore per fathom. This winze is being sunk at the east end of the bunch of ore, and is turning out better than expected. Nothing doing in the 30 east since last reported; I hope to set this level to drive on Saturday next, being our setting-day.—South Lode: We have just commenced lead cut in the 40 to intersect this lode; should the lode at this depth remain of lead instead of blende, as I have every reason to think it will, large returns of ore may be realised. The rise in back of the 20 will produce 4 tons of blende per fathom. We have erected new water-wheels for pumping, crushing, and driving the dressing machinery, and put up a new jigging-machine capable of working over from 40 to 50 tons of stuff per day, and does its work well. The new machinery is of the latest improvements, and very substantial. A new dressing-house and stable have been built, and other building repaired, and the floors laid out to great advantage. The returns of ore I have forwarded to the secretary, also the stock on hand, and if all our bargains had been at the end of June or early in July. All our surface arrangements have been completed, and the machinery is in good working order. The future expenditure will be in laying out



the mine, and from the character of the lodes we may reasonably expect that valuable discoveries will be made. I beg to say I am much pleased with the arrangements that have been made. Our operations have been principally confined to driving and stopping; the lode has yielded on an average from 10 to 20 tons of lead per fathom. We have sold since the commencement upwards of 50 tons of lead ore from the above mine, but, unfortunately, our capital was not sufficient to work the two mines, and we have done hardly anything since the end of January. The mine is still worthy of further development.—E. FEARSE.

A vote of thanks to the Chairman terminated the proceedings, and at the close of the meeting some of the forfeited shares were applied for.

#### ROSE AND CHIVERTON UNITED MINING COMPANY.

At a meeting of mining agents held at this mine, on May 16, Mr. CHRISTOPHER STEPHENS asked whether he might be permitted to invite the opinions of the agents present, who had inspected the mine that day?

Capt. JOSEPH VIVIAN, of North Wheel Croft, in reply, said that he gave him great pleasure to respond to the call which had been made, not only on the information of the meeting, but for the public good. The two new lodes discovered, parallel with the old East Wheel Rose lodes, which produced such rich results, present precisely the same appearance as those which proved so rich in the old mine, the composition being the same, and embedded in rock of the same character. Under similar circumstances, when very rich lodes had been discovered in the Camborne and other districts, he had always found the results following which he confidently looked for here. The stuff now being raised from No. 1 parallel lode was as fine looking as he ever saw, and the same as that from No. 2 parallel lode (formerly East Wheel Rose) would be as rich a mine as ever it had been in the past. He had only to say he was glad there was such a good opening for enterprising men of the present day, and that the past two or three years large quantities of lead have been returned from the immense piles of ore at surface, and still larger quantities yet remain, which will leave a considerable profit to the adventurers. The same character which will leave the old lodes to be found over a considerable extent of ground still remaining to be worked.

Capt. JOHN GRENFELL said he was proud to follow such a veteran in mining as Captain Joseph Vivian; and he could only say that he most emphatically endorsed everything stated by Captain Vivian, and said he was delighted with the property.

Capt. HAXCOCK, from North Wheel Chiverton, was pleased to give his favourable opinion, and expressed himself thoroughly satisfied with the undertaking.

#### FOREIGN MINES.

##### ST. JOHN DEL REY MINING COMPANY (Limited).—Advices received.

ST. May 21, ex steamer Navarre via Bordeaux:—  
GOLD AND PROFIT.—The produce for March being 50,119 oits.  
Deduct loss in melting into bars 224 oits. = 49,895 oits.  
Which, at 7s. 3d. per oita, is equal to £19,334 6 3  
Cost—Labour, &c. Rs. 59,357 7 3 = Rs. 97,741 0 62, excl. 1s. 11½d. 9,570 9 7  
Other charges Rs. 35,353 2 26½

Leaving a profit on the month's working of 9,763 18 8  
GOLD EXTRACTED TO DATE.—The gold return from the first division of the month of April, being a period of 11 days, amounts to 16,905 oits. It has been derived as follows:—  
Oltas. Tons ore. Oits. p. ton.  
From general stamps 9924 . . . . . 1248 2 = 7 950  
From Herring ditto, Bahu ore 4320 . . . . . 414 9 = 10 412  
" Lyon ditto, M. and W. Cachoeira 2661 . . . . . 377 5 = 7 049

Total stamps produce 16,905 . . . . . 2940 6 = 8 294

The foregoing return, of about 1536 oits. per ton from the stamps, is fair produce; it is equal to the average standard yield obtained last month.

##### THE DON PEDRO NORTH DEL REY GOLD MINING COMPANY.—

Balance of profit and loss account, Jan. 1, 1867, £ 1,693 18 10  
Profit for January, February, and March 10,611 14 2 = £12,305 13 0  
Capt. T. Treloar reports—The gold returns for March amount to the highly satisfactory figure of 20,056 oits. (2313 oza. troy), or 7840 oits. more than that of the previous month, at 8s. 6d. per oit. £2628 16 0

Cost 20,056 oits., at 8s. 6d. per oit. 2395 1 7

Profit. £2628 16 0 . . . . . £2628 16 0

The Maguine Mine is looking well; in fact, as we advance eastward into the hill it is yielding better and better. But whether the increase of gold at present is coming from a bunch, or from some of the main deposits, I am unable to say. I may be mistaken, but my opinion is that it is coming from a bunch; but even so, seeing such successive bunches so much richer than the preceding one strengthens my belief more and more that when we reach the junction of the two hills, and which point is yet some 70 fms. distant from our present workings, something grand will be found. At the Mina de Lagoa we have struck Jacotina of a kindly appearance, and this, together with the gold from the Buraco de Maguine, and the promise of the property, as a whole, is causing considerable excitement. The weather has been unfavourable for surface operations; but even so, the new washing strakes at Maguine have been advanced a stage. When completed, this work as a whole will be of considerable magnitude, as well as be very suitable for the treatment of our Jacotina formations.

##### ANGLO-BRAZILIAN GOLD.—Capt. T. Treloar reports.—The produce for March amounts to 4247 oits. (4390 oza. troy), exceeding that for February by 827 oits.

Produce, 4247 oits., at 8s. 6d. per oit. £1911 3 0

Cost 4247 oits., at 8s. 6d. per oit. 1723 17 1

Profit. £1911 3 0 . . . . . £1911 3 0

The operations have been carried on with regularity. The produce in excess of that for February. The level driving, east of Grenfell's, on the new lode, at the deep adit. The lode at the Buraco Secco looks well, and good progress has been made towards work for 12-head stamps.

RHENISH CONSOLS.—G. Sweet, May 16: Since the breakage of the crank to Blöcher engine it has been repaired, and new brasses placed in the principal bearings. The engine works well. The water is again drawn out of the mines, and operations resumed in the bottom workings, but in consequence of the breakage alluded to but little has been done in the bottom level since my last report. The drive on the north lode in the adit level is still worth 20 cwt. of lead ore per fathom. A stop in back of this drive will produce 18 cwt. of lead ore per fathom, rising on the middle lode, east of cross-cut, in the 10 fathom level, the lode is worth 7½ cwt. of lead ore per fathom. The drive is good; we hope to raise a good deal of ore from this point. At Christiansia there is but little alteration to notice since my last, the lode in Pittar's sink being still worth 4 tons of lead ore per fathom, and there is but little alteration in Sweet's sink. Our principal object is to communicate as early as possible Sweet's sink with the 10 fathom level, and Pittar's with the 17 fathom level. These sinks, when boled, will lay open a large quantity of ore ground; and Sweet's sink, when communicated with the 10, will ventilate the adit level, which is very much needed. In driving a cross-cut north, 10 fathoms east of Pittar's sink, we have found good stones of lead ore, but the cross-cut is not yet through the lode. We have still water enough to drive Christiansia wheel, and everything connected with the machinery is in good working order.

WEST CANADA.—Capt. W. Plummer, April 15: Huron Copper Bay: The lode in the new engine-shaft is improved, and the ground favourable for sinking. The lode in the 10 fms. level is not so promising as when I reported last. The 50 fms. level, east of Palmer's, yields 2½ tons per fath., and looks promising to continue. Bray's engine-shaft is being sunk with dispatch; the lode is not much changed. The lode in the 50 west yields about 2 tons. The lode in that level east of shaft is extremely poor. All the stops on Huron Copper Bay are without change. Wellington: The level driving, east of Grenfell's, on the new lode, yields about 1½ ton per fath., the lode is worth the level. Crase's Shaft: The part of the lode that we are carrying is poor, but good progress is being made. Mitchell's Shaft: The lode yields 2 tons per fath., and the 24 east is worth 2½ tons, having lately very much improved. Collings's Shaft: The lode is very much improved by its proximity to the floor through which we have lately passed. We hope as we get away from it that the lode will recover its former productiveness. The stops are yielding about the average supply of ore. Bruce Mines: The lode in the level going east of trial shaft is smaller, and does not contain so much ore; we hope it will again improve. The stop yields about 2 tons per fath. The level west has become poor, but the stop has improved, and now yields 2 tons per fath. Ferrier's Shaft: The 50 west is much the same as before reported—poor. The lode in the eastern level has somewhat improved, and has been for the past fathom or so very encouraging.—Taylor's Shaft: The lode is poor, but good progress has been made in sinking, and at the end of the present month we intend to commence driving east and west, and we are encouraged to believe that the lode will improve in each direction. This is our troublesome season, owing to the rapidly going down of the water, and winter's snow, but I am glad to say that this year it has given us less trouble than for the past two or three years. The machinery all works well, and all our works are going on favourably.

FORTUNA.—May 11: Canada Incoast: In the 100, west of O'Shea's shaft, the men have met with a hard bar of ground, and consequently little progress has been made. The lode in the 90, west of Henty's shaft, has improved, and is looking very kindly, worth 1½ ton per fathom. In the 80, west of same shaft, the lode is looking more promising than it has for some time past. In the 70, west of Kennedy's shaft, there is a large, strong lode, containing tribute ground, worth 1½ ton per fathom. In the 55 east, the lode is small and compact. In the 45, east of San Tomas shaft, the lode continues very small, the granite very hard for driving. The men in Judd's shaft are working hard. The shaft is off the lode and in solid granite. In San Tomas shaft good progress is being made. Francisco's winze is going down in a promising and productive lode, worth 1½ ton per fathom.—South Lode: The lode in the 40, east of San Pedro shaft, is large, and spotted with lead. In the 40 west the lode is very strong, worth ¾ ton per fathom. The 30 west is unproductive. Rosa's winze will open out a piece of moderately productive tribute ground.—Los Balidos Mine: The 100, west of Morris's shaft, is traversing the main vein, and in the 90 west the ground is getting easier, and we hope it is near the main part of the lode. In the 75, west of Buenos Amigos shaft, the lode is small and poor. The lode in the 65, west of San Carlos shaft, is divided into sundry branches. There are some small strings of lead in the 55, west of same shaft, but the lode is valueless. The 100, east of Morris's shaft, is producing the lode is regular, compact, and of a promising appearance. There is no improvement to notice in the 75 east. In the 65, west of San Pablo's shaft, the lode is worth 1½ ton per fathom. In San Miguel shaft the lode is open and kindly, worth 1 ton per fathom. In Balverde's winze the lode is very compact and firm, worth 1½ ton per fathom; this will reach it in the present month. The lode in Torre's winze is not so good as it was; it is now worth 1½ ton per fathom. In Marin's winze the lode is composed of quartz, carbonate of lime, and lead ore, worth for the latter 1 ton per fathom. Requena's winze is going down in a splendid lode, worth ¾ tons per fathom.—General Remarks: The tribute

department in both sections of the mine yielded a good quantity of mineral in the past month, and has not undergone any unusual fluctuation. The surface work is going on regularly, and the machinery is in good working order. We estimate the raisings for May at 400 tons.

ALAMILLOS.—May 11: The 4th level, west of San Rafael shaft, is hard and poor, with an increase of water. In the 3d level, east of La Magdalena shaft, the lode is large and strong, but not so productive as when last reported on. The lode in the 3d level, east of San Enrique shaft, is very compact, and of a good appearance. The 3d level west has come in contact with a cross-course, which has destroyed the lode. The lode in the 4th level, east of Taylor's shaft, is disarranged by the intersection of a cross joint. The lode in the 4th level west is large and powerful, composed of carbonate of lime, granite, and lead ore. The 4th level, east of San Adrián shaft, has slightly improved. The lode in the 4th level has undergone a very favourable change; it is a fine looking lode, worth 1½ ton per fathom. In the 3d level west the lode is still influenced by the main slide, and consequently unproductive. In the 2d level, east of Crosby's shaft, the lode has been thrown off its course by a strong lead, and is unproductive. The lode in the 2d level west has been very changeable for several years in length. There is no change at Magdalena shaft. Nothing has been done to sinking Taylor's shaft since putting down the 11-in. plunger. Since our last report the men have resumed sinking San Yago shaft. In the cross-cut below the 2d level the lode is without much change.

LINARES.—May 11: South Lode: The 110, west of the 143 winze, has fallen off in value since our last, but has a kindly appearance. There is a little improvement in the 75, west of Warner's shaft; the lode is more open, and producing good stones of ore. In the 75, west of Crosby's shaft, the lode is split into small branches, yielding a little ore, but not enough to value. The 75, east of same shaft, is looking very promising, and worth 2½ tons per fath.—East of Engine-Shaft: In the 95, east of Thorne's shaft, the lode is large, speedy for driving, and producing a little ore. The 95 west is poor at present. There is but little improvement in the 75 cross-cut south since our last. The sinking of Taylor's shaft is going on satisfactorily. In the 147 winze we are sinking on the south part of the lode, which looks very promising. No. 153 winze is in advance of the 110, is troublesome for sinking, and letting out water freely.

CAPE COPPER.—April 8 to 19: At Ootkip the sinking of the engine-shaft was progressing favourably. In the bottom of the tunnel the east level had been driven during March 15 ft., the rock continuing hard. Driving south from east level in the bottom of tunnel had passed through blue schistose rock of an easy character, lined on its face of cleavage with copper schist. Captain Clemes says of this level, "In none of the other workings of this mine have we met with such a large and continued extent of highly favourable copper ore bearing ground." The engine-shaft will be sunk below the east level in the tunnel, and will be an important operation for developing the ore ground in that direction; so far as can at present be judged the indications are favourable. The yield from Ootkip during March was 400 tons. The trials at Thorn river had not resulted favourably; some good stones of ore had been found, but had dwindled out as the shaft advanced. The Ottawa sailed from Hongkong on April 6 with 340 tons. The Levant has arrived at Swansea with 441 tons, and the Cambrian and Celt steamers bring together 136 tons. The Hastings left Simon's Bay, on April 12, for Hongkong, to load about 550 tons. The furnaces had been smelting Ootkip dredge ore, averaging 19 per cent., and had produced about 97 tons (Swansea weight) of regulus, averaging about 51 per cent. During the past month 280 tons of ore, ex Celt, Roman and Briton steamers, have been sold at Swansea, at 14s. 9d. per unit, at public ticketing, and 500 tons, ex Fearless and Glenavon, at 14s. 9d. per unit, by private contract.

VAL SASSAM.—Thomas Rickard, May 18: Ussera: Since last reported upon, the end of the Cantina gallery has continued to advance through good ore ground. During April, and for what is gone of the present month, its yield has been upwards of 350, per fathom. The lode is about 4 feet wide, producing stuff, 12 to 13 tons of which we have obtained by sampling will turn out 1 ton of ore. The end is taken by fourmen, at 110 fms. per metre. The rise which is making just behind this end is for the present very hard, so that progress is small. The lode in it is turning out ore to the extent of about 16l. per fathom. The middle calcina end is still poor, though the lode is large, and not unpromising; it is re-set to four men, at 90 fms. per metre. The upper calcina end continues to produce a little orestuff, but is not yet sufficiently rich to admit of giving it to a value per fathom. The ground there is still comparatively easy, driving at 70 fms. per metre, and of best third tribute for what can be picked up. The Tailor's gallery has been lengthened 160 metres in the month (April). In the last few days the lode has become productive, now worth 10l. to 12l. per fathom. The end is driving by two men, at 60 fms. per metre. The Delpezo gallery is still passing through unproductive ground; driving by four men, at 95 fms. per metre. The raisings of March and April have amounted to 8163 kilograms. The tribute pitches are taken again, at rates which will average nearly the same as those for March and April; and with the number of hands we can now employ the raisings during the take of May and June will, we estimate, amount to from 10 to 12 tons, or (say) 20,000 francs to 24,000 francs worth of ore. We shall soon be able to advise you of having sent forward another parcel, of about 5 tons, of silver ore. We shall not be so long in preparing the next batch.—Toschino Mine: Next week we shall set to work on the dressing-floors at this mine. The spring is now so far advanced there as to admit of a beginning. We intend to set the miners to work at the beginning of next month. We hope some time next month to be able to deliver a batch of ore to the smelting-works from this mine also.

#### [ADVERTISEMENT.]

From Mr. EDWARD COOKE:—Having been in Cornwall some portion of the present week, I am obliged to contract my usual weekly remarks on the state of the Mining Market, &c. Being one of the original lessees of the CHIVERTON MOOR MINE, I deemed it my duty to attend the meeting on Tuesday. With regard to the boundary question, which has been the subject of some controversy of late, I will here remark that the piece of ground in question never was included, nor was it ever intended to be included, in the Chiverton Moor sett. From circumstances that have transpired in the workings of this mine, it is very important that it should be added to its boundary. This I have good reason for believing will be amicably arranged in a very short time. As to the prospects of Chiverton Moor, no one can deny but they are of a very high order indeed. It is the opinion of good authorities that the lode, from which several thousands of pounds worth of lead has already been sold by this company is not the rich West Chiverton, but the lode which is called the "Tribute" lode, and the prospective value of the mine, as it is considered an absolute certainty that the lode of the latter mine runs into Chiverton Moor sett. With regard to the present position of WEST CHIVERTON, I was informed by the best authority that at no former time was the property so valuable. The shareholders may rest assured that they have a very valuable and lastingly profitable investment. At NORTH WHEEL CHIVERTON I found the works progressing very satisfactorily. The operations are mainly confined to the deeper levels (from which some good silver-lead is being raised), and the sinking of the engine-shaft. Everything tends to confirm the opinion expressed by the most eminent practical authorities, that North Wheel Chiverton can scarcely fail to become a very productive silver-lead mine. It was only on Tuesday last that the manager of the richest mine in Cornwall told me that he had not the least doubt that the main lode in North Wheel Chiverton is the great champion lode of the Old Shepherds Mine, that gave enormous profits to its shareholders. I made a few remarks last week upon WEST KITTY MINE. I would advise my readers to keep this mine before their notice. At the meeting, on the 17th inst., it was deemed advisable to make a call of 2s. per share, which will pay off all liabilities, and provide for the current quarter's working. In the meantime it is not at all improbable but the returns of tin will materially assist the working costs of the mine, if not be entirely sufficient to pay current expenses. The shares will have a great rise.

From Mr. J. B. REYNOLDS:—During my recent visit to Cornwall, I have been struck much forcibly by the fact that there are several mines which offer more inducement to the investor than any other kind of security I could name. The Rose and Chiverton district (or, as it is better known, the East Wheel Rose district) is literally abounding, I believe, in mineral wealth. As for old East Wheel Rose, now known as ROSE and CHIVERTON UNITED, there can be no question of its great importance, and no one appears to call into question the unanimous opinion which has been pronounced in its favour by first-class authorities. I shall never forget my recent visit to the property. NORTH CHIVERTON is now looked at with much favour, and its management is indisputably the best extant. With regard to the results of labour there, WEST CHIVERTON and WHEEL CHIVERTON are also well worthy of attention. GREAT RETALLACK and PRINCE OF WALES should be carefully watched. Of the WEST KITTY meeting it hardly becomes me to speak. The mine is a success, and perhaps that is the real reason why everyone is pleased. A more satisfactory meeting, however, I hardly ever attended. At first, I rather objected to the amount of the call, but, on reflection, I am satisfied, as the company will stand all the better for having a good balance on the "other side." This mine is worked very cheaply, and the shares have been in quiet demand for some time past, and prices have been advancing, and doubtless will continue to do so—on merits.

From Mr. EDWARD BREWIS:—With Consols at 93½, cheap money, railways looking up, and foreign stocks considerably higher, what are better indications of improving times? Money cannot be always kept locked up at ½ per cent. for the half year, and the "Hermes" overlooks the "Hermes" in the Mining Market as well as at the "mighty great feast." The Darbee, which the representatives of the Tycoon were wont to call it. Don Pedro shares, I am happy to state, have now arrived at 3½, and with some foundation for this price—quite facts of profits here, totally different from the assumed ones of Frontino and Bolivia, which were passed from month to month two years ago, and the perfect furor which lasted some four months is still fresh in the public mind. Well, let Frontino and Bolivia rest. From present appearances the annual profit at Don Pedro North Del Rey is equal to 15 per cent., with prospects of increasing. Bickford's shares, which were at 1½, 20, CHIVERTON MOORS, which were at 5l. on Monday, close 5½ to 6l. NORTH CROFTS have been less active, and GREAT RETALLACK have materially receded, perhaps to come again. PRINCE OF WALES, on favourable reports, have risen to 54s., while CLIFFORDS, after being at 5½, close 4 to 4½. WEST CHIVERTON, 64 to 66, ex div., and the mine looking well. Altogether the prospects for mining are very flattering, and shares that are good and selling low ought to be picked up; and if I may be allowed to state, investors cannot do better before buying high-priced shares than to look around and search for diamonds in the rough.

From Messrs. WARD and JACKMAN:—The great problem which puzzles and perplexes the brains of humanity is how to get rich. From boyhood until old age, and usually until death, the mind tries to figure it out; but, alas! seldom, if ever, arrives at the solution, because no man, perhaps, ever reached the point of being rich in a sense synonymous with contentment. Many have thought that if they were possessed of 10,000l. they would be satisfied, but when they have attained that they want 10,000l. more, and so on indefinitely. Others there are whose aspirations are only for a cottage and a pig, but a sufficiency of wealth is an *ignis fatuus*, which always keeps beyond the reach, and which men chase until they fall into their graves. To bring these remarks more practically to the point, we know many who can endorse these facts, that capitalists often state their intentions of selling certain speculative stocks when they have advanced to a certain price, and as certainly alter their minds when it is obtainable; a reaction takes place, the golden opportunity is lost, and thus experience is often dearly bought. Remember, therefore, that a "Bird in hand is worth two in the bush," and the safest way to get rich is to learn to take a profit. Numerous instances could be mentioned, which have occurred recently. Depend on it there is a time to sell as well as a time to buy, and the former is the

most difficult to determine, and still more difficult to persuade people to realise when a good profit can be secured. We have several times favourably mentioned GREAT WHEEL FORTUNE, and we are pleased to be able to report a decided improvement in this once-favoured "Bal." We are informed the lode in Tugg's shaft is everything that can be desired, the rock (killas) is congenial, and the character of the lode is altogether good, and producing tin worth 30l. per fm., and there is every likelihood of its proving more valuable in depth, which now is but 30 fms. under the surface; and its position is parallel with the productive part of Great Wheel Vor, and of the Carmuel lode in this sett. The depth of the mines in comparison with that of Great Vor is trifling. The districts are identical, and similar results may justly be looked for; the shares, therefore, should not be lost sight of. The shares in WHEEL SETON have been in especial request this week. The lode in the 180 is worth 9 tons; the 160, 6 tons; the 150, 7 tons; and the winze in the bottom of the 170, which is 7 fms. before the 180, 10 tons. The sampling, on Wednesday, was 900 tons; this ought to leave 3l. dividend. The first ordinary general meeting of the shareholders in the Mineral Rights Association is at last called for Thursday next, May 30; we trust all interested in this undertaking will endeavour to attend. Why, as far back as November last I urged repeatedly the desirability of a voluntary liquidation, and even then left with the secretary a memorial, signed by myself and a number of shareholders, urging the matter on the attention of the board.

#### [ADVERTISEMENT.] THE MINERAL RIGHTS ASSOCIATION (LIMITED). TO THE SHAREHOLDERS.

GENTLEMEN,—I have just had placed in my hands Mr. Murchison's letter of the 20th inst., to which I hasten to reply. Mr. Murchison's wish is to caution you against a circular from me. He says that very recently I could not have thought it desirable to wind-up the company, as I was pressing the board to purchase a colliery, which the directors declined. Why, as far back as November last I urged repeatedly the desirability of a voluntary liquidation, and even then left with the secretary a memorial, signed by myself and a number of shareholders, urging the matter on the attention of the board.

As to the charge of my wishing to sell a worthless colliery, I may say that during the delay that occurred on the part of the directors of the Mineral Rights Company this worthless undertaking was sold to private parties for more than the price asked from our company. Indeed, the colliery was submitted to your managing directors for the exact sum it was offered to me, and purely in the interests of the Association. Mr. Murchison's agent, Mr. Darlington, spoke favourably of it, and Mr. Joshua Richardson, the eminent colliery engineer, also reported upon it in the same commendatory spirit. Mr. Murchison never saw the property, never took any trouble respecting it, his time being too fully occupied in promoting other adventures.

The objects of the company are so numerous and varied that we shareholders cannot realise the enormously risky nature of the transactions in which the directors have the power to involve us. It is stated that the company have lately employed a portion of the funds in purchasing an interest in several "established companies." I ask, are Otea Coppershares, Pestarena Gold, or Chontales, interests likely to advance the success of our company? Why, Otea shares are unsaleable. This company, by the way, Mr. Murchison manages, and one or more directors of our company are also interested in it, as well as in Chontales and Pestarena Gold. No call is anticipated by Mineral Rights Company. Why surely not; but will Mr. Murchison guarantee that no more calls will be required in Chontales? Chontales, with its paid-up capital of 100,000l., has expended more than that sum in realising 8000l. worth of gold, whilst the annual profit was estimated in the prospectus to be 234,000l. from the gold alone, independently of silver, in which the mine was said to be very rich. Let us ask you, gentlemen, whether this is the "class of interests in several established companies which hold out prospects of early success."

Mr. Murchison tells us that the directors hold a large interest in the company, when he knows as well as I do that within the last few days their holdings were as under:—

Shares.	Shares.
Mr. J. H. Murchison (managing director).....	110
Mr. Bunyon (director of Chontales Gold).....	100
Dr. Quin (director Central American).....	100
Mr. Stanton (director in Chontales, Otea Copper, and Pestarena) 100	
Capt. Watson.....	100
Mr. Pittar.....	1600

Of this last number I have yet to learn how many have been purchased at a low price from the disheartened shareholders. It is certain, however, that Mr. Murchison has bought shares at 4s. 6d. each.

Mr. Murchison will not condense one thing particularly affecting the position of our company. It is this, with a paid-up capital of 30,000l., our assets, deducting the expenses of journeys to Nicaragua, California, Scotland, and elsewhere, will (if the investments in the established companies holding out prospects of early success should realise the full estimates) possibly reach 22,500l. Thus 7500l., or one-fourth of the entire capital, is irretrievably lost, and nothing has been accomplished beyond the purchase of a few highly hazardous shares. For this lucrative business our directors receive 5000l. per annum, whilst, in addition, our managing director and his clerk, our secretary, has a further large sum, which may, possibly, account for their earnest wish to perpetuate the company, and to throw doubt upon the unpleasant facts which I have felt it my duty to my fellow-shareholders to point out.

I would impress upon you that our liabilities have not terminated with the 17. already paid, but that we have a further liability of 4l. per share, which we may any day be called upon to satisfy. I beg your attendance at the meeting on the 30th inst., at two o'clock, or otherwise favouring me with your proxy, which will be used for winding up the undertaking and returning the money, 15, Throgmorton-street, E.C., May 21.

JOHN BATTERS.

CORNISH PUMPING ENGINES.—The number of pumping-engines reported for April is 23. They have consumed 1879 tons of coal, and lifted 150 million tons of water 10 fms. high. The average duty of the whole is, therefore, 54,000,000 lbs., lifted 1 ft. high, by the consumption of 112 lbs. of coal. The following engines have exceeded the average duty:—

Engines.	Millions.
Chiverton—Cookney's 60 in. ....	60.8
Cargill Mines—Michell's 72 in. ....	60.4
Chiverton Moor—70 in. ....	59.9
Great North Downs—Sleggan's 70 in. ....	58.4
Great Work—Leed's 60 in. ....	60.3
North Roskear—Doctor's 70 in. ....	56.2
North Wheel Croft—Trevenson's 80 in. ....	64.9
West Chiverton—Hawke's 80 in. ....	62.8
West Wheel Seton—Harvey's 80 in. ....	58.3
Wheel Seton—Tilly's 70 in. ....	71.6

ST. DAY UNITED MINES.—At the Court of the Stannaries, Truro, on Saturday Mr. Roberts, in moving for an order for winding-up the affairs of these mines, stated that the petitioners were John Solomon Bickford, Sir William Williams, Bart., John Richards, Henry Tregoning, and Henry Michell. The mines had been carried on on the Cost-book Principle from September, 1852, by an unregistered company consisting of more than seven members. From its commencement down to May, 1862, the company was divided into 20,000 shares; but on the 9th of May, 1862, that number was reduced to 4000, and subsequently this number was further reduced by relinquishment to 3310, of which the petitioners held as follows:—J. S. Bickford, 100; Sir W. Williams, 893; J. Richards, 50; H. Tregoning, 10; H. Michell, 12. The company consisted of about 200 shareholders, many of whom were resident out of the county. The petitioners, Bickford, Williams, Richards, and Tregoning, were the committee of management, and the other petitioners were purser. The petition stated that the company had ceased to carry on business, or were carrying on only for the purpose of winding-up, and for some time the mines had been carried on at great loss. The company were unable to pay their debts, and their liabilities far exceeded their assets; and on April 15, 1867, the adventurers at a special meeting resolved that in consequence of Mr. John Michael Williams having relinquished his shares, and in consequence of other shareholders having determined to retire from the company, the mine be abandoned and offered to the lords, and that in the event of their refusal to accept it the materials be sold. The petitioners had paid all calls made on their shares; but in consequence of refusal or neglect by some shareholders, and of inability of other shareholders by reason of insolvency, there were calls in arrear to the amount of about 2000l., payment of which could not be enforced without the authority of this Court. The petitioners, therefore, prayed that the company be wound-up under the provisions of the Companies Act, 1862.—The petition was unopposed; and, after customary formal proof by affidavit, a winding-up order was granted.—In reply to an enquiry from the Vice-Warden, Mr. Roberts said he feared that if the mine should be stopped neighbouring mines would be affected; but he hoped that a stoppage would be prevented. The mine was divided into a great number of shares, and consequently it had become extremely difficult to collect calls; and from the low prices of tin and copper, there had been great difficulty in working the mine. Still, the efforts which had been made had been successful in getting in many calls; and, for the collection of the remainder it had become necessary to ask the assistance of this Court. He hoped, however, to be able to lay before the Court some scheme to prevent the irreparable mischief that must ensue if such a mine were to stop in so populous a district as that of Gwennap. He might say that Sir William Williams took great personal interest in the matter, not only because of his holding in the mine, but for the sake of the populous neighbourhood near which he lived. It was a very old mine, and, like the neighbouring mines Clifford Amalgamated, which comprised United Mines, Consols, and Clifford, three large mines, it maintained a great number of labourers, and was of vital importance to the district.

THE COAL TRADE.—On Saturday a deputation of the Coal, Corn, and Finance Committee of the Corporation, consisting of Messrs. Bedford, Snowdon, and Walker, with Mr. Scott, the registrar of the Coal Exchange, accompanied by Right Hon. the Lord Mayor of Dublin down the river to the Pool and Victoria Dock, and also visited the "Atlas" of the latter gentleman, a novel and useful invention, by which over 1200 tons of coal are discharged in 10 hours. We understand the Lord Mayor is making inquiries for the purpose of introducing improvements into the Dublin coal trade. His lordship was greatly pleased at the improvements effected in the trade, and expressed to the deputation and to Mr. Scott his obligations for the courtesy and attention which he had received. The steam tender of Mr. Corry was in attendance, and conveyed the deputation down the river.

HOLLOWAY'S OINTMENT AND PILLS.—SELF HELP.—In all sickness it was a momentous matter to find any easy, ready, and reliable remedy for outward disfigurements and inward disorders before the inestimable discovery of these preparations. No invalid need now be at a loss for successfully managing ulcers, sores, tumours, boils, bruises, sprains, &c. Enveloping Holloway's medicine are very intelligently printed directions for using them, which should be attentively studied, and immediately followed by the application of his treatment. Sooner or later the sufferer will assuredly triumph over the worst. This searching ointment dispenses all the malignant humours, which aggravate many diseases of the skin, often prevent the cicatrization of ulcers, and even kind inflammatory tendencies in the system.



## BRITISH MINES.

of No. 1 cross-cut, the lode is a little more than 100 ft. wide, and is composed of coarse- to medium-grained quartz, with some iron pyrite, and a little galena. The lode and capel continue full 15 fathoms wide, but the present producing work of a low quality for tin, worth 18¢ per fm. for that width. The slope in the back of the capel is more level, east of the cross-cut, the lode is 12 ft. wide, and is composed of medium-grained quartz, with some iron pyrite, and a little galena, but not quite so good for tin as last reported on, now worth 20¢ per fm. that width. In the 130, east of the shaft, we are driving a cross-cut north through the lode; we have cut into it 9 ft.; the lode is of a very promising character, composed of quartz, peach, and iron, and producing a little

production of lead, silver, and zinc, without a problem. I believe that as this area is being developed it will be found to lay open good bunches of lead. The zone in the 10 south is in two parts: the eastern part, varying from 6 to 15 in. thick, of friable quartz, with a small vein of lead, letting out pretty much water, promising lead, and indicating a speedy improvement again; this level has a driven south from the shaft 7 fms., 4 1/2 fms. of which has been through a bunch of silver-lead, worth at times more than 2 tons to the ton, and

aping; at present, the lode is smaller than it has been, but we look for an improvement in driving west, as the copper ore appears to be increasing in value in that direction. The drifting of the 24th footm level west of hump, on a south branch of the middle lode, has been discontinued, the branch having failed; we have put the men to drive the 40 fm. level east of Ballarat shaft, on Ballarat lode, as we think, although the lode is unproductive at present, the ground in this direction should receive some trial. In the 40 fm. level, west of Ballarat



**THE MECHANICIAN AND CONSTRUCTOR FOR ENGINEERS.**—A work which, to judge from the five numbers already issued, will prove of immense practical value both to mechanical engineers and learners has been undertaken by Mr. CAMERON KNIGHT. In connection with forging, the book will be of peculiar value—each individual piece of machinery is to be treated of distinctly, and considered as something that must be forged previously to being shaped and bent, and the reader is made aware of the article being of much more importance and expense than any after operation. The work is written in a style which has, even, perhaps, less worked than any other in connection with mechanical engineering. The work being issued by Messrs. Spou, of Charing-cross, is a sufficient guarantee that the plates and printing will be all that can be desired, and the manner appears to have given every care that the subject shall be treated in such a manner as to be of the greatest utility. The branches of engine-making selected for forging, namely, plates, flanges, bolts, and nuts, are all well illustrated, and being carefully led from the description and making of the tools used to the production of the finished article. The details of the work sound and



forging such simple articles as bolts and nuts, keys, straps, screw-keys, and similar articles, several methods of making each article being mentioned, so that individual makers of small work may select the plan most suited to their requirements; joint-plugs, slide-valve rods, wedge-shafts, eccentric-rods, piston-rods, connecting-rods, links, cross-heads, reversing-gear, paddle-shafts, crank-shafts, and other shafts, small and large—the small being first taken in order to make the work progressive and instructive to learners, and to those who may not previously have studied engineering. After the forging the various other portions of the work are explained, and as the entire book is to be completed in about 24 numbers, at 2s. each, it is placed within the reach of all for whom it is intended.

**MINES RATING BILL.**—Upon the requisition of a large number of influential gentlemen connected with the development of the metaliferous mines of Cornwall, a general meeting was convened by Mr. Thomas S. Bolitho, the high-sheriff of the county, and held yesterday, "to take into consideration the provisions of 'The Mines Assessment Bill,' now before Parliament." It is urged that a more unfortunate time to saddle mines with additional burdens could not possibly have been chosen, and that, therefore, every effort should be made to avert the passing of the Bill. The depressed state of the Cornish mining interest has for some time past been proverbial, and it is very truly said that to add to the existing difficulties of the miner, by imposing additional rates, must be, in every sense of the word, injurious to the interests of both lords and adventurers, and will most certainly tend to cast great discouragement on mining generally. Nothing can be more erroneous, it is said, than to include in the Bill tin and copper mines on precisely the same footing as iron mines. Although theoretically the rating of mines may be equitable enough, there is no question that practically mines are in a position distinct from every other branch of industry; for whilst in all other trades the returns and, indeed, the profits also are generally in proportion to the outlay upon plant, &c., no such proportion exists in a mine—one mine worked almost without plant or outlay yields immense returns and large profits, whilst another worked with enormous capital and costly plant yields no returns worth consideration; hence, whilst in ordinary industrial undertakings the rating of works and machinery is admissible and not inequitable, in mines the lords' dues, which are, in truth, the sole test of commercial value, could alone be taxed with anything like equity. The requisition to the High Sheriff was signed not only by two of the local members of Parliament, the Mayors of Penzance and Truro, and many of the gentry of the county, but also by a large number of the bankers, professional men, tradesmen, and other inhabitants of Truro, Liskeard, Camborne, Penzance, St. Just, Redruth, Hayle, St. Ives, Helston, St. Austell, St. Columb, and Falmouth. It is much to be hoped that the efforts so unanimously resolved upon will be productive of the result so much desired.

**SOUTH FOWEY CONSOLS.**—As will be seen, the agent's report, inserted in another column, announces the commencement of operations here, and in clearing the Marsh adit several lodes are laid open for inspection; these generally, as was expected, present the most kindly indications, some of them producing the usual promising features of gossan, &c., with stones of yellow ore. Although so shallow, this surely looks well, and, considering the locality, the stratum of mineralised rock, and the run of the lodes, which indicate junctions and intersections, both in lateral extent as also in depth, it is almost a certainty that there is a good mine in prospect. A goodly number of the shares are held in the immediate neighbourhood, many of the holders being old tributors of the adjoining productive mines, Fowey Consols and Par Consols.

**MINERAL RIGHTS ASSOCIATION.**—The general meeting is called for the 30th inst.; the directors' report and the balance-sheet will be issued to-day. The directors remind the shareholders of the unprecedented state of panic and depression that has prevailed almost from the day the company was established, necessitating on the part of the board more than usual caution and prudence. The safety of the funds in hand was of more consequence than the possible interest to be derived from them; and notwithstanding that the company's bankers were amongst those who succumbed to the great pressure of the times, no loss whatever has been sustained. A paragraph from the prospectus, stating the objects of the company, is given, from which it appears that there is power to purchase an interest in any established companies which hold out prospects of early success. Acting on their own opinion, and at the suggestion of some of the largest shareholders, the directors have invested a portion of the funds in several such companies, and some of these investments have already risen in value, and are likely to further advance. The results of investigations in Central America and in California are alluded to, and it is stated that other properties in this country and elsewhere have been brought before the board, some of which have been visited and examined, and not found desirable to acquire, while others are still under investigation, and are likely to lead to favourable results. The balance-sheet shows that the assets amount to £2,751. 1s. 8d. The expenses necessarily incurred in establishing the company, and in making various important investigations, have been considerable, but the experience thus gained is valuable for the guidance of future operations. To allay any anxiety as to a call, the directors announce that they have resolved to enter into no engagements which will involve any liability beyond the amount already paid up, without the express consent of a general meeting. In conclusion, the directors express their conviction that having regard to the various objects authorised by the prospectus and the Memorandum of Association, and taking into consideration the present unusually advantageous time for acquiring properties and investments, and the prospective improvement likely to take place in affairs generally, together with the experience which the board has gained from the past, the company is capable of being made to realise large profits; and should they retain the confidence and support of the shareholders they have no doubt that the results of their proceedings in the ensuing year will show that their expectations are well founded.

**GOLD MINING IN CANADA.**—The latest advices from the De Lery Gold Mines, bearing date May 7, announce the finding on the Gilbert River portion of the largest nugget of the season—a lump 63 ozs. in weight. The get has lately exceeded 4000. worth of gold per day, although operations have been entirely confined to the working over of the dirt thrown out during the winter. The success obtained on the De Lery property has naturally caused considerable animation throughout the district as well as in London with respect to the locality, and Mr. A. Mitchell, a well-known practical miner and geologist, has been engaged, and is immediately proceeding to inspect and report on the St. Joseph de la Beauce property, which adjoins the De Lery, and is under sale to Mr. Glover, of Quebec, and a few friends in London. The Canadians are, of course, elated with the discoveries, which they observe have been achieved by the most primitive means. What then, they ask, may we not expect when systematic operations have been commenced? The present prospects justify the hope that the Canadian El Dorado will eclipse the boasted treasures of California and Australia. In the case of the Chaudiers gold fields the anticipations of great results are not based upon mere surface indications or speculative theories. On the contrary, we have positive results unqualified elsewhere. The effect of the development of such great natural resources upon our future cannot be over-estimated.

**THE GEOLOGY OF NEW SOUTH WALES.**—Reference having been made in the report upon the Universal Exhibition at Paris to the specimens of Australian coal exhibited, and to the specimens of the accompanying rocks, some "Remarks on the Sedimentary Formations of New South Wales," by the Rev. W. B. CLARKE, M.A., will not be out of place. This paper forms one of a series printed by the New South Wales Commissioners for the Paris Exhibition, and we are indebted for a copy to our esteemed correspondent, Mr. Wm. KEENE, the Government Examiner of Coal Fields—the series embracing an account of the woods indigenous to the colony; of the introduction and cultivation of the Orange, by Dr. G. BENNETT; on the Progress and Present State of Astronomical Science in New South Wales, by Mr. J. TEBBETT, Jun.; on the New South Wales Coal Fields, by Mr. W. KEENE; on the Australian Vertebrata—Recent and Fossil, and on the Fossil Remains—Wellington Caves, both by Mr. GERARD KREFFT, in addition to that now under consideration. Mr. Clarke alludes to the general geological features of the Australian continent, and observes that whilst marine deposits of tertiary age are found along the coast of Western Australia, and along the southern coast from Cape Leuwin to Cape Howe, there are no known marine tertiary in any part of the coast of New South Wales and Queensland up to Cape York Peninsula, and the reason of this may be that the eastern extension of Australia has been cut off, perhaps, by a general sinking (which is in accordance with the Barrier Reef theory of Mr. DARWIN), and which has some support from the fact that there is repetition of Australian formations in the Louisiana archipelago, New Caledonia, and New Zealand, in the latter of which occur abundant tertiary deposits, in which case the intervening ocean may be supposed to cover either a great synclinal depression or a denuded series of folds. Relatively speaking, therefore, the Cordillera of the eastern coast has not been subject to the changes which introduced the relics of a tertiary ocean. The great carboniferous series, so prominent in New South Wales and some parts of Queensland, but which is less distributed in Victoria, and there only partially and irregularly, as to the portions still remaining, has been broken up and carried away, so as to have left the various members dislocated, ruined, and broken up, in such a way as to allow no clear view to be taken of the whole till all the several portions have been separately examined; and to the want of this personal examination on the part of certain paleontologists he attributes the perseverance with which they so long disputed facts as attested by geologists in New South Wales, who are familiar with the latter, and with Victoria also. The distinctive differences in material mineral wealth between Victoria and New South Wales are not altogether confined to gold or tin, which latter metal New South Wales is the New South Wales Court at the Paris Exhibition; but coal, iron, and copper, and perhaps lead, also exhibited, prove more than an equivalent of the great amount of gold at present in Victoria. Mr. CLARKE makes some interesting remarks upon the various geological epochs as they pre-

sent themselves in New South Wales, with a brief statement as to their connection with other portions of Australasia, so that the paper is really a complete review of the subject.

\* A SUPPLEMENTAL SHEET was given with last week's Journal, which contains Mr. W. Fothergill Cooke's paper on New Machinery for Cutting, Tunnelling, Quarrying, and Facing Slate, Stone, and Marbles; Mr. Smyth's Lecture at the Royal School of Mines; Statement of Blast-Furnaces Blowing in North Staffordshire, Yorkshire, Derbyshire, Northampton, and Lincolnshire, Shropshire, and Scotland; and the Founder of the South Staffordshire Iron Trade; the Australian Mining News; Dr. Ure's Dictionary of Arts, &c.; Steam-Engines; New Steam Stamping Quartz Mill; Furnaces, &c.

\* With next week's Journal we shall give a SUPPLEMENTAL SHEET, in which will appear an illustrated paper on High-pressure Quick-speed Expansive Engines; on Steam-engines, as they are and as they should be; The Iron Ships of the British Navy; The Great Ironmaster; and some other matters now necessarily postponed.

## The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, MAY 24, 1867.

COPPER.				IRON.			
Best selected, p. ton	84	0	0	Bars Welsh, in London	6	10	0-6 15
Tough cake and tile	81	0	0	Ditto, to arrive	6	10	0-8 0
Sheathing & sheets	83	0	0	Nail rods	7	10	0-8 0
Bolts	84	0	0	Stafid, in London	7	10	0-8 0
Bottoms	88	0	0	Bars ditto	7	10	0-9 10
Old (Exchange)	70	0	0	Hoops ditto	8	12	0-9 12
Burra Burra	85	0	0	Sheets, single	9	10	0-11 0
Wire	85	0	0	Pig No. 1, in Wales	4	0	0-4 10
Tubes	85	0	0	Refined metal, ditto	4	0	0-5 0
BRASS.				Bars, common ditto	5	0	0-6 0
Sheets	per lb.	9d.	10d.	Do. mch. Tynes or Tees	6	0	0-6 0
Wire	per lb.	8 1/2d.	9 1/2d.	Do. railway, in Wales	5	0	0-6 0
Tubes	per lb.	10 1/2d.	11 1/2d.	Do. Swed. in London	10	0	0-6 0
SPELTER.				To arrive	10	0	0-6 0
Foreign on the spot	21	5	0	Pig No. 1, in Clyde	2	14	0-3 5
" to arrive	21	5	0	Do. f.o.b. Tynes or Tees	2	9	0-6 0
ZINC.				Do. Nos. 3, 4, f.o.b. do.	2	6	0-2 7
In sheets	27	0	0	Railway chairs	5	10	0-15 0
TIN.				" spikes	11	0	0-12 0
English blocks	89	0	0	Indian Charcoal Pigs,			
Do., bars (in barrels)	90	0	0	In London p. ton	7	0	0-7 10
Do., refined	92	0	0	STEEL.			
Banca	892	0	0	Swed., in kegs (rolled)	14	0	0-14 10
Straits	85	0	0	" (hammered)	15	0	0-16 10
TIN-PLATES.				Ditto, in faggots	16	0	0-0
IC Charcoal, 1st qua.	1	8	0	English, spring	17	0	0-23 0
IX Ditto, 1st quality	1	14	0	QUICKSILVER (p. bottle)	6	17	0-0
IX Ditto, 2d quality	1	4	0	LEAD.			
IX Ditto, 2d quality	1	10	0	English Pig, com.	19	17	6-0
IX Coke	1	3	6	Ditto, L.B.	20	0	0-20 5
IX Ditto	1	9	6	Ditto, W.B.	22	5	0-0
IX Ditto plates, p. ton	13	0	0	Ditto, ordinary soft	20	0	0-20 10
Ditto, at works	12	0	0	Ditto, sheet	20	15	0-0

\* At the works, 1s. to 1s. 6d. per ton, not generally known in the London market.

**REMARKS.**—During the past week the Metal Market has been rather more quiet, partly so, probably, on account of the general holiday taken on the Epsom Downs in the course of the week, and in the events of which so great an interest is taken by all classes of the community in the metropolis, and partly by the sudden and extraordinary changes in the weather which have lately occurred, and which are calculated to render parties less disposed to transact business than during more genial weather. We do not, however, look upon this with any uneasiness, and fully anticipate that the general improvement formerly noticed will continue, and that we shall be able to record a much more lively state of things very soon, and that business has again resumed a state of activity and vigour. The advices just received from India are of a generally satisfactory character as regards metals. The recent intelligence from India, and the improved state of things here, has had the effect of causing better prices to be obtained; and we, therefore, look for an access of orders being received from that quarter, which will be the more satisfactory, as a proof that the long-continued depression in business there is about to be changed; while it is also calculated to encourage the hope that at length we may again return to our former satisfactory commercial activity with that part of the empire. The prices of metals have not materially altered since our last report, still there appears to be a general tendency upwards, and we have little doubt that before long we shall find that the value of most metals have become considerably enhanced, and that prices will gradually assume a much firmer position, and buyers will not be able to operate upon such advantageous terms as they can now do.

**COPPER.**—The market for this metal has not been very active during the week, but prices have not at all declined; indeed, they are, if anything, rather firmer. A good deal of business has been done in Burra, at 87.

**IRON.**—In Staffordshire a fair amount of orders continue to be received, and the works are in operation about three-fourths time. There seems more confidence than there was in the future prospects of the trade, and buyers, both of pig and manufactured, are ordering rather more freely. The continental orders continue of moderate amount, and are expected to be larger, while there is a moderate demand for the United States. The state of railway finance operates to diminish the demand on that account, but on the whole the trade keeps steady, though the orders are unequal to the capacity of the works. In Welsh, the movement previously referred to is maintained, and consumers generally show more readiness to enter into business. This was looked forward to as the year advanced, although it was thought that long before this the demand would be much better. There is no actual improvement in prices, but a reaction in that respect is probable in due course. The works are principally employed on foreign orders, home engagements being still slow in coming forward. In plates only an occasional contract is offered, and quotations are quite unremunerative. Purchasers of pig-iron are slowly increasing. In Swedish iron not quite so much business is being done. In Scotch pig-iron the market has not been very active, and the price has rather declined, about the middle of the week to 53s. 6d. cash, but has since rallied to 53s. 7 1/2d. cash.

**LEAD** remains in the same position as last week, a moderate business being still done, with prices firm at the quotations.

**TIN.**—The market for foreign has rather improved, and business has been done in Straits at 85 1/2. 10s., at which it remains firm; there is, however, an anticipation that better prices will be realised ere long. Banca in Holland has been sold at 53 1/2 fls., and there are still sellers at the same price.

**SPELTER.**—Holders have become much more firm, and it is impossible to purchase under 21 1/2. 5s. on the spot; indeed, at this price purchases cannot always be made.

**TIN-PLATES.**—The trade is just now rather quiet, but there are hopes that before the close of the quarter the enquiry will become brisker. There are now no stocks at the works.

**STEEL** and **QUICKSILVER** are without change.

**COAL MARKET.**—The fresh arrival this week numbered 101 ships. The stormy weather increased the demand for house coals, and we quote an advance of fully 6d. per ton, at which a clearance was effected. Hartley's firm at the late quotations. Hetton Wallsends, 19s.; Haaswell Wallsend, 18s. 6d.; South Hetton Wallsend, 18s. 6d.; East Hartlepool Wallsend, 18s. 6d.; Harton Wallsend, 17s.; Gosforth Wallsend, 17s. Unsold, 3 ships; at sea, 5 ships.

**EXPORTS OF COAL.**—By the Monthly Circular of Messrs. Higginson, Liverpool, we learn that the quantity of coal exported in April was 784,554 tons, against 888,490 tons in the corresponding month of 1866, showing a decrease of 103,936 tons. The particulars are—From the Northern ports, 411,396 tons; Yorkshire, 30,353 tons; London, 4333 tons; Liverpool, 39,535 tons; Severn ports, 234,209 tons; and Scotch, 64,728 tons. The decrease was—Northern ports, 55,108 tons; Yorkshire, 2852 tons; Liverpool, 16,416 tons; Severn ports, 30,166

tons; Scotch ports, 466 tons. The increase—London, 62 tons. Total January to April, 2,556,300 tons; same time last year, 2,759,306 tons—showing a decrease of 203,006 tons.

A fair average amount of business has been transacted in the MINING SHARE MARKET this week, and prices, taken generally, are firm. The chief transactions have been in Prince of Wales, West Chiverton, Great Retallack, Wheel Seton, Great Vor, Wheel Bassett, Chiverton Moor, Chontales, East Caradon, North Treskerby, Tincroft, West Seton, and a few others. The standard for copper is slightly up this week. West Chiverton shares have been firmer, and leave off 63 to 67; at the meeting a dividend of 2s. per share (6000s.) was declared, and, after paying about 450s. for extra costs, the balance in hand at the last meeting has been added to, and ores to the value of 2000s. sold towards the next quarterly account. The 110 east is worth 60s. per fathom, the 110 west 40s., with the water very strong in the cross-cut, and the agents think the south part of the lode is still standing south. The 100 east is worth 50s. per fathom, the 100 west 80s. per fathom, the winze below the 100 east 70s. per fathom, the rise above the 100 west 80s. per fathom; the 90, west of Burgess's shaft, the rise above the north part, is worth 30s. per fathom; the 90, west of Batters's shaft, is producing stones of lead; the 80 west is worth 8s. per fathom; the south part, but when last cut through was worth 80s. per fathom; the 90 west is worth 8s. per fathom, and improving; the 60 west is worth 10s. per fathom, and east 12s. per fathom. From this report it will be seen the mine continues to look well. Wheel Chiverton, 5 1/2 to 6; we have not yet received particulars of this meeting. Chiverton Moor, 5 1/2 to 5 1/2; at the meeting the accounts showed a balance of assets in hand of 750s. 10s. 6d., and a call at 2s. 6d. per share was made. The lead ore sold during the quarter realised 1194s. 17s. 6d. The requisition for an alteration in the management was withdrawn, on the understanding that some arrangement should be made for the concession of the plot of ground on the south-western boundary of the sett. The report states the engine-shaft has been sunk to the 65, and a cross-cut driven 13 fathoms south towards the lode, which is daily expected to be met with, and the prospects are such as to warrant the expectation that the mine will prove productive in depth. Bedford United, 1 1/2 to 1 1/2; Chontales Gold, 2 1/2 to 3 1/2; Clifford Amalgamated, 4 to 4 1/2; Cook's Kitchen, 10 to 11; East Bassett, 15 to 17; East Caradon, 5 1/2 to 5 1/2; East Carn Brea, 2 1/2 to 2 1/2. Prince of Wales shares have been firm, and leave off 54s. to 56s.; the cross-cut has been passed through in the 45 west, and the lode appears to have been rich close up to it on both sides, for as far cut into west it is worth 20s. per fathom. The 55 west has improved to 70s. per fathom. The ore sold yesterday (117 tons) realised, with carriage, 985s., and next week there will be another sampling, of 130 tons at least. East Lovell, 8 1/2 to 9; East Russell, 2 1/2 to 2 1/2; East Grenville, 2 1/2 to 2 1/2.

Great Retallack shares declined to 37, but leave off 3 1/2 to 4; the fall was owing to reports circulated on the market that the ore had cut out, and, as no information could be obtained from the office of the company until Friday, many of the shareholders got alarmed, and sold. For the future the agent should be instructed to telegraph at once any important changes to the office, for the benefit of the shareholders generally, and enable them to put the true value on market reports. The No. 2 shaft has been sunk below the 10 fms. level 3 fms., and in the bottom there is a good branch of silver-lead, worth 15 to 20 cwt. per fathom. In the 10 south the lode is in two parts, varying from 6 to 15 in. wide, of friable quartz, with a small vein of lead, indicating an improvement. This end has been driven 7 fms., 4 1/2 fms. of which has been through a bunch of lead, worth at times more than 2 tons per fathom, and averaging 1 to 2 tons. The agent hopes to sample a good pile of silver-lead ores on June 11. Frank Mills, 17s. 6d. to 20s.; Frontino and Bolivia Gold, 8s. to 10s.; Great Laxey, 17 1/2 to 18 1/2. Wheel Buller, 22 to 24; at the meeting to be held next Wednesday the accounts will show a very small loss on the two months, even though 200s. extra have been charged in respect of rods and wire-rope. Great North Downs, 4 to 4 1/2; Great Wheel Vor, 17 1/2 to 18 1/2; Herodfoot, 34 to 36; Hingston Down, 2 to 2 1/2; Marke Valley, 4 1/2 to 4 1/2; Mineral Rights Association, 8s. to 10s.; North Croft, 4 1/2 to 4 1/2; North Downs, 2s. 6d. to 5s.; North Retallack, 2 1/2 to 2 1/2; North Treskerby, 1 1/2 to 1 1/2; Providence Mines, 30 to 32; Rosewell Hill and Ransom United, 35s. to 40s.; South Caradon, 340 to 360; South Grenville, 2s. 6d. to 7s. 6d.; Tincroft, 14 to 15; West Caradon, 9 to 10; West Seton, 140 to 145; Wheel Bassett, 67 to 69; Wheel Mary Ann, 14 to 15. Devon Great Consols, 390 to 400; a dividend of 6s. per share was declared to-day, leaving 18,535s. 3s. 1d. in hand.

The Market for Mine Shares on the Stock Exchange during the week has been active, especially for shares in the Brazilian gold mines. St. John del Rey have risen to 62, 63. Don Pedro, 2 1/2 to 2 1/2; the returns show a profit of upwards of 6000s. for the month. Anglo-Brazilian, 1/2 to 1/2; Chontales are firmer, at 1/2; Pestarens, 1/2 to 1/2. In English mines, Great Laxey shares are very firm, at 17 1/2 to 18 1/2; Prince of Wales are in great demand, at 54s. to 56s. Chiverton Moor firmer, at 5 1/2 to 5 1/2; the meeting passed off satisfactorily. West Chiverton shares are again in demand, at 66 to 68; the mine never looked better. North Chiverton, 4 1/2 to 4 1/2; the works are progressing well. Great Vor steady, at 17 1/2 to 18. At the Westminster Mine the prospects are very good.

**IRISH MINE SHARE MARKET.**—Considering that railway, bank, steam, and miscellaneous securities have all been more or less neglected for some time past in consequence of the increased attention paid to Government stock, the Mining Share Market has done a fair amount of business, with but very little fluctuation in prices, except those of the Mining Company of Ireland. In our quotations published on the 11th inst. we noticed the sudden rise in these shares of 16. 10s. for the preceding week, as from 16s. to 17s. 10s. Since that the advance movement continued until they reached, on the 15th inst., 18s. for cash, and 18s. 5s. for deferred transfer, making a total rise in about three weeks of 2s. 5s. per share. At this point speculators commenced operations for the realisation of profits, which had the effect of bringing about a somewhat strong reaction, ending in establishing a reduced quotation of 17s., or a fall of 1s. 5s. for the week, but still leaving a balance of advance of fully 1s. on the last month. They would now be readily taken at 17s. for cash (7 1/2 paid), but holders are too firm to facilitate business at that figure. Wicklow Coppers have again been exceedingly steady, having only on one occasion fluctuated between 22 1/2. 5s. and 22 1/2. 2s. 6d. (2s. 10s. paid), leaving off strong at the higher price. Carysfort fully (or 50s. paid) shares have had much attention paid them, and frequently been dealt in at 12s. 6d., which indicates a considerable improvement in the public estimation of the chances of this mining property. Connors, which we last recorded as at 16s., and of which price we prognosticated a continuance "for some time to come," soon advanced to 17s., but have since lost this advantage, and are again at 16s., buyers prevailing, however. General Mining Company for Ireland shares have lately been passed over, no doubt in consequence of the approaching general half-yearly meeting of the shareholders, which is advertised to be held on Monday, June 3, at the Company's office in Dublin, when the directors' and engineer's reports and explanations are expected to be of considerable interest, and favourable, so far as the productiveness of the company's mines is concerned.

At Truro Ticketing, on Thursday, 3992 tons of ore were sold, realising 17,943s. 1s. The particulars of the sale were:—Average standard, 116 1/2. 18s.; average produce, 6s.; average price per ton, 4s. 10s.; quantity of fine copper, 247 tons 9 cwt. The following are the particulars of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
Apr. 25.	3692	114	8	0	14s. 0d.	68 1/2
Apr. 26.	1866	108	17	0	14s. 0d.	68 1/2
May 2.	2285	107	11	0	14s. 0d.	68 1/2
" 9.	1228	119	7	0	14s. 0d.	68 1/2
" 23.	3992	116	18	0	14s. 0d.	68 1/2

Compared with the last sale, the advance has been in the standard 15s., and in the price per ton of ore about 1s. Compared with the corresponding sale of last month, there has been about a similar increase.

The directors of the Devonshire Great Consolidated Copper Mining Company, at their board meeting, held yesterday, declared a dividend of 6s. per share, arising from profits on sales of copper ores sampled in the months of January and February last. After payment of the same there











Chilian copper has regained a certain amount of favour on the  
 ave market; several lots of disposable Chilian in bars have found  
 purchasers at 74 $\frac{1}{2}$  per ton. At Paris the tone of the article has been  
 etter; Chilian in bars is quoted firmly at 74 $\frac{1}{2}$  per ton, while other  
 alities have supported previous rates. The favourable advices from England  
 have been accepted with confidence on all the German markets, and the bulletins  
 the past week, without indicating any very great activity, nevertheless show a  
 rmer tendency. At Cologne prices are firm, without change. Less business  
 has been done in tin on the Dutch markets. Advices from Rotterdam and Am-  
 sterdam show, in fact, that transactions are very much reduced, and that in

THE BANCA TR ISLANDS—THE COAL OF THE DUTCH EAST INDIES.—Another interesting, though far less extensive mineral collection than that of the United States is that in the Netherlands Court, on the right of the Rue des Pays Bas, illustrating the mineral resources of the Dutch East Indies. There are some excellent specimens of red and black argillaceous schist, porphyroid granite, grès ferrugineux, grauwacke, granite, quartz, &c., and tin ores from the districts of Jeboco, Blinjoë, Muntok, Soengeiliat, Pangkalpinang, Soengeiselan, and Toboli, all in the island of Bangka or Banca, and tin ores (Wolframite), magnetic ironstone, gossan, hornstein, &c., from the island of Blitong, or Billiton, in the Riouw Lingga Archipelago. There is granite, clayey mica-schist, and alluvium tin ores from the island of Singkep; argillaceous schist from the island of Lingga, and various minerals from the islands of Gallang, Buiang, Soegi, Roendoer, and Rarimon. Grès marnes, diorite, schistose clay, and alluvium tin ore are also shown from the territory of Siak, the whole forming not only a fine collection, but also showing in an extraordinary degree the ample resources for tin of the Dutch East Indies. The collection is sent by the Government officers of mines, and with the sanction of the Government of the Dutch East Indies.

MAY 22.—The Pig-Iron market was a little irregular at the close of last week, and prices rather weakened; but since then we have experienced greater stiffness, and an advance has been gained. On Monday a large business was done at the higher rates, and on Tuesday these were again augmented. To-day the market was still strong at the advance, 53s. 7½d. to 53s. 10½d. having been paid, cash, and 54s. one month; g.m.b., No. 1, 54s. 3d.; No. 3, 53s. 3d.; Gartsherrie No. 1, 65s.; Coltness, 64s.; Glengarnock (at Ardrossan), 61s. A considerable business has been done on these terms. The shipments are fully 2000 tons in excess of last year, the quantity for the week just closed being 13,347 tons, against 11,205 tons in the same week last year. There have been considerable exports to the Baltic and Northern ports; and with a better feeling and an increasing foreign demand, something like vigour is expected to be imparted to the market. In Manufactured Iron there is a growing supposition that things have reached their worst, and certainly the contracts for iron vessels which have been booked in the Clyde this last week to some extent justifies the hope. Three of the eight new gunboats for the Admiralty are to be built here, and will consume a large quantity of iron in their construction; and three or four other contracts have also been concluded. Several contracts for pipes are also in the market, which will tax the resources of ironfounders in that department.

Coals, if we were to judge from the returned shipments, are in great demand, 27,275 tons having been shipped this week, against 18,650 tons in the same week of last year; but these exports are largely made up of the cheapest kind—Main and Pyotshaw descriptions. The colliers who had been reduced *de a-day* about Motherwell, Parkhead, Merryton, Allanton, &c., have partially resumed work, while others have lifted their grail and removed from their houses, to avoid ejection. The same remarks apply to the colliers in Ayrshire. The men demand a price which masters cannot afford to give, and not the efforts of all the Unions combined will compel the masters to ruin themselves to supply the men with wages which their labour will not support. Some of the colliers here contentedly kept their places, and the whole of the Wishaw men, or nearly so, had the wisdom not to come out. The stocks of coals at the pits, or in depôts, coupled with the lessened demand, will prevent our coalmasters from



experiencing any difficulty, while the men themselves must be suffering from privations.

Shipbuilding on the Clyde is now bearing a more cheerful aspect, and a fair trade is expected during what remains of the year. The swift steamer *Herald*, employed last year on the Glasgow and Campbeltown station, has been sold to ply between Barrow (Morecombe Bay) and Douglas, Isle of Man, in connection with the Midland Railway. She has been only about 18 months in use, and, having originally been constructed for running the blockaded American ports, was built specially with a view to speed.

The following is reported to be a correct return of the tenders per ton (builders' measurement) given to the Admiralty for the eight new gun-boats—

Lawrie, Glasgow	£20 0	Dudgeon, London	£32 0
Harland and Wolff, Belfast	22 0	London and Glasgow Engineer- ing Company, Glasgow	32 0
J. and G. Thompson, Glasgow	25 10	Denny and Brothers, Dumbart.	34 0
Randolph, Elder, and Co., Glasgow	25 15	White, Cowes	34 0
Pearse and Co., Stockton	26 0	Thames Company, London	34 0
Raid and Co., Port Glasgow	27 10	Maudslay, London	35 10
Laird, Liverpool	29 0	Green, London	36 10
London Engineering Company, London	29 15	Wigram, Glasgow	37 5
Jones and Quiggin, Liverpool	29 16	Hill, Port Glasgow	38 17
Miller, Liverpool	31 10		

It is to be considered here that if the Messrs. Napier, Govan, with their past experience and complete machinery for the work, had to tender at 37l. 6s., those builders into whose hands the contracts have fallen, and are marked thus (\*), will be losers by the transaction.

#### REPORT FROM MONMOUTH AND SOUTH WALES.

MAY 23.—In the Iron Trade last week's position is fully sustained, and makers are beginning to express more confidence in the future. The worst is now, undoubtedly, over, and, taking the most unfavourable view of prospects, it is clear that there is a fair probability of a gradual, steady improvement. After the disasters of the last twelve months it must, of necessity, take a long time to restore that confidence which previously existed, but whatever is the amount of trade done, there is no doubt that it will be entirely free from speculation. A New South Wales order for 5000 tons of rails has been secured by a Monmouthshire house, and other engagements are expected to follow. On continental account the demand keeps about the same, rails being enquired after rather more freely since the war cloud has passed away, and there is a likelihood of additional business following. At Cardiff and Newport several vessels are taking in cargoes for America, and those who predicted a serious falling off in the exports to the States as the consequence of the abandonment of the Tariff Bill have been so far agreeably disappointed. There is no change to note in home requirements. Buyers of pig are reader purchasers, and the current quotations are better maintained. A check has been given to the demand for Tin-Plates, from what cause does not appear quite clear. Liverpool houses are giving out orders rather sparingly. In steam coal the exports keep about the same as last week, complaints not being so general as to the scarcity of vessels. The requirements of several of the continental markets are somewhat larger, but there is an entire absence of that encouraging animation which was so conspicuous last year. Taking all the markets together, the purchases are far below the capabilities of the collieries, and it must not be forgotten that, large as the output was this time last year, the district is now capable of a still larger get, owing to the opening of new pits and the development of old collieries; hence the slow demand is more keenly felt. House quantities are in moderate constant request, the keen competition tending to keep prices down.

The report of the Committee of Investigation appointed by the shareholders in Shackleford, Ford, and Company (Limited) may be expected to be issued within a week or ten days. On Thursday Mr. H. W. Ford, the managing director, was adjudicated a bankrupt at the Bristol Bankruptcy Court. The names of Mr. W. C. Shackleford and of Mr. E. Dargiefield, also connected with the unfortunate concern, appeared in the list of bankrupts on Friday.

At the Blackwood Petty Sessions, on Tuesday, Mr. James Gregory, of Bristol, manager of the Bedwas Llanwit Colliery Company (Limited), was charged with manslaughter. The charge arose out of the death of a workman who fell down the shaft, and the jury, at the inquest, returned a verdict of "Manslaughter" against Mr. Gregory. Mr. Lionel Brough, Her Majesty's Inspector of Mines, and other witnesses, attended at Blackwood, on Tuesday, but, as the Superintendent of Police declined to prosecute, the charge was dismissed.

The directors of Powell's Duffryn Coal Company (Limited) have determined on either letting or selling the Aberaman Works, lately purchased by them from Mr. Crawshaw Bailey, M.P. The company are prepared to enter into a liberal arrangement for the supply of coal to the works. Considerable distress has prevailed at Aberaman since the partial stoppage of the establishment, a number of the hands having failed to get employment elsewhere. Several entertainments have been held, the proceeds of which have been devoted towards relieving the distress.

A Geological Association has been formed at Llanelly, in connection with the Mechanics' Institution. A museum is attached to the institution, containing a collection of minerals, which will afford an ample field for study, and will be of great assistance to the members of the association.

Last month the Great Western carried 40,214 tons of coal to the metropolitan markets, of which about four-fifths was from South Wales. This is the largest return for a long time past, and it indicates that the Welsh colliery proprietors are gradually developing a London trade. By railway and sea it is computed that the average quantity of coal sent from South Wales to the metropolis is from 8000 to 9000 tons weekly, or somewhere close upon half a million tons per annum. Should the Great Western lay down a narrow-gauge extension, there would be a very increase in the traffic, and until this is done Welsh coalmasters will not be able to compete successfully with the North of England.

The contemplated communication between the Taff Vale Railway, at Cardiff, and the East Bute Dock is completed, and, in future, minerals sent over the Taff Vale for shipment at that dock will be conveyed direct, instead of going over the Rhymney, as has hitherto been the case. The delay in completing the communication arose through differences between the Taff Vale board and the Trustees of the Marquis of Bute.

The following are particulars of the new Pitmen's Picks, which were referred to in a recent Journal as having been invented by Mr. F. W. Dabne, engineer, of Morriston, and Mr. David Thomas, mineral agent to the Government and Company of Copper Mines, Cwmavon, and which are destined to prove a most valuable acquisition in all mineral operations. At present the great weight of the miner's tools and their liability to get out of repair are serious impediments to work, but these defects are very considerably obviated, if not altogether removed, by the simple yet most valuable invention of the patentees. The new pick is so constructed as to admit of the points or cutters being inserted or taken out at pleasure from a socket formed in the body of the pick, and these points or cutters are securely fastened in the sockets by means of a small screw inserted through the parts of the body of the pick facing the pick-handle, so placed that it shall not come in contact with the coal. The weight of the tools, assuming them to consist of four picks and four "belts" averaged 20 lbs., whereas the weight of the same set of tools of the new description would be only 6 lbs. 8 ozs., a very important consideration to the miner when the distance from the anthracite to the working places in the mines is considered. In addition to these advantages, there is a great reduction in the capital of tools, as one pick provided with ten moveable points represents five picks; and the collier, being always in possession of sharp tools, is, of course, able to complete his work with greater ease and perfection. It can be applied to all descriptions of picks now used in mining operations. A large number of the new picks are now in use, with most satisfactory results, in some of the best collieries in North and South Wales; and no doubt, when their advantages are more widely known, they will be generally adopted.

The arrivals at Swansea include—the San Jose, from Carrizal, with 653 tons of copper regulus for the Coburn Mining Company; Faithful, from Bilbao, with 202 tons of iron ore for W. H. Tucker; Samuel, from St. Malo, with 200 tons of iron ore for W. Rowland; Clementine, from Antwerp, with 100 tons of pipe-clay to order; Ocean, from Antwerp, with 8005 casks of spelter, for Governor and Company of Copper Mines; and the Onward, from Cherbourg, with 50 tons of iron ore for T. Walters.

FOREST OF DEAN.—The continued activity in the district trade is on every hand apparent, and whilst May is generally regarded as a "dull month" it is far from being exemplified just now. On the other hand, so far, and undoubtedly, it will prove somewhat similar at the winding-up of the accounts at the end of the month; there is a diminution compared with the trade of April. On the whole, the Forest trade for this month is a good average one, giving general satisfaction to the employer and employee.

The Soudley furnaces, after having been closed for six months, have again been opened, much to the satisfaction of the old hands—many of whom have been during this time comparatively idle—and not less so, we believe, to the company, the Messrs. Gould Brothers—who caused the repairs from first to last to be prosecuted with as much speed as possible. It was thought that a new furnace would have been put up; this, however, proved to be only presumptive, for the old one has only been repaired. A new blast-oven has been put in, and the engine repaired, together with a new 12-ton fly-wheel. During the few days since the furnace has been "going," some excellent iron has been made. The firm are well placed for orders, having sufficient on hand to last some time. Only one furnace is in blast, and as soon as the strength of the new work has been sufficiently tested, they hope to make 150 tons per week. The price of Forest iron as reported is low, but is now improving. There are ironworks in contemplation on the other side of the Forest, and a company is reported to be in formation.

There are large quantities of valuable mine stated to be under the Lydney Park estate, and which belong to the Rev. W. H. Bathurst. It is from this part that the new company are hoping to obtain their material. Should Mr. Bathurst concede to the request made to him, and it is sincerely to be hoped for the sake of the district he will, the valley of Whitecroft will be greatly benefited, and an impetus will be given generally to the trade in that part, as well as largely promoting the welfare of other local interests, who will realise a corresponding amount of profit from the establishment of such works.

The tin trade continues very satisfactory. The masters are well off for orders, the price for best qualities being 27s. 6d. at the works. A downward tendency, notwithstanding, is anticipated. This week full time is being made by the men at all the Forest works.

The coal trade throughout the district may be set down as very en-

couraging, both distant and local consumption being good. Indeed, there is scarcely a master or a colliery that has any accumulation of coal in the Forest of Dean, even in the more inland parts it is readily caught up, the average price for best qualities being 8s. 6d. per ton on the banks.

The Paragon and Leather Pits, near Cinderford, are in the market, and will be offered for sale at Newnham, on May 31. They belong to Mr. Cornelius Wadding, of Littledean. Each colliery commands four seams of coal—20 in., Lowrey, Rocky, and Churchway High Delf, and are estimated to contain 101,500 tons of coal. They are worked by one engine. The investment will not be large, but unquestionably safe.

Some few months ago it was stated, and generally expected, that the Forest of Dean Central Railway would be open for traffic during this month, but at present there is little indication of any such report proving correct, neither is it at all probable that such will be the case for some time to come. If delayed for any further considerable length of time its ultimate success—excepting the opening of new works in proximity thereto—is very questionable, inasmuch as the lessees will have to compete against the Severn and Wye Company, who have a branch running into Mosley Green, where they run in a parallel line with each other, and, as stated last week, the Severn and Wye are about making a broad gauge of their line, which is a highly desirable step. The greater object of the founder of this line had in view was to make docks at Brinspall, on the Severn, the position or situation of which is highly favourable for such a purpose. Had the Crown rendered help, as was hoped it would, and more especially did expectation run high with the original shareholders from the fact that the Crown had a large and increasing interest with the Forest of Dean, and hence it was believed the docks at this spot would have been built. But since iron clads, and not "Hearts of oak are our ship," the Forest timber is not so important in the construction of our Navy. Lord Nelson could not have contemplated such a change in the building of ships of war, for when in the Forest of Dean, in the year 1802, he deplored the then existing exposure of the young oaks, remarking in reference thereto "that nothing can grow self-sown, for the deer bark all the young trees, and vast droves of hogs are allowed to go into the woods in the autumn; and if any fortunate acorn escapes their search, and takes root, then flocks of sheep are allowed to go into the forest, and bite the tender shoot." Speaking of forest oak, so little has been the demand of late that its marketable value has become considerably less, even less than elm.

A serious accident was, fortunately, averted on the Bullo Line on Wednesday. The engine was conveying a number of load trucks from Cinderford, and when passing Soudley the guard observed that the hinder wheels of one of the front trucks had become detached, and the truck, loaded with 12 tons of coal, absolutely dragging along the rails. The line had heavy gradients from top to bottom, and the train at the time was well "broke." The engine driver was communicated with, and he was able to stop the train in the short opening between the Bradley and Hayhill tunnels. George Edge, the driver, at once proceeded to Bullo, and returned with a staff of men, who at once set to work and repaired the truck, the traffic being delayed for several hours.

#### REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

MAY 23.—There is no change to note in the state of the Iron Trade. The demand continues steady, but unequal to the wants of the district, in which, perhaps, somewhere about four-fifths work is being done, or barely that, perhaps, on an average. A Mr. Roberts, said to be from Sunderland, has been to Wolverhampton this week trying to get workmen in the iron trade to go to the North of England. It is said the object is to supply the place of men on strike there.

The meeting of the creditors of Messrs. Reeve Brothers, iron merchants, of Wolverhampton, on Tuesday, resulted in the assignment of the estate to Mr. T. Griffin, manager of the Bilston District Bank, and Mr. G. L. Underhill, iron merchant. The balance-sheet showed the liabilities to be 15,577l., and the assets 10,147l., with bad debts 5300l. It was stated by their solicitor that Messrs. Reeve did not intend to resume business. The suspension of Messrs. Brotherton and Co., of the Imperial Tube-Works, Commore-green, Wolverhampton, followed that of Messrs. Reeve. It is said that their liabilities amount to 30,000l., but that they only ask to be allowed time to pay their debts in full by instalments.

It appears that the portrait of the great ironmaster, presented to the Wolverhampton Town Council, is that of John and not of Samuel Wilkinson, and that the resemblance to the portrait on the coin sent by Mr. Stockdale is remarkable.

With reference to the proposed deputations to the Home Secretary, from the Mine Agents' Association of South Staffordshire and East Worcestershire, to complain of the decision in the case of "Regina v. Cope," several times previously referred to, it is said that no further steps will be taken, and it is further stated that the Chartermasters also are not proceeding with reference to the new 20th special rule. Mr. Wynne, in his evidence before the Select Committee on Mines, the other day, said the introduction into the rule in his district of the provision that timber must be put up every 6 ft. had proved most salutary. This is far more stringent than the South Staffordshire rule.

Some time ago a sort of association was organised at Darlaston by the shopkeepers to resist the keeping of a provision shop by the Darlaston Steel and Iron Company. Advertisements were published inviting persons to make complaints, and on Friday an information was heard before Mr. Isaac Spooner, the stipendiary magistrate at Wolverhampton, in which a collier, named John Cookson, charged the cashier of the firm with paying him 4s. otherwise than in coin. The process gone through at the works was somewhat elaborate, and it was sought to be shown that the object merely was to provide a check on the man who kept the shop, and that purchasing there was entirely voluntary. The magistrate, however, regarded the case as proved, and fined the defendant 10l., the highest penalty the law allows.

The enquiry as to the deaths of the four persons killed at the Grange Pits of the Old Park Colliery, at Stretley, in Shropshire, by the breaking of a cog-wheel as they, with four others, were being lowered into the pit, was commenced on Tuesday. Mr. Wynne, the Government Inspector, elicited from every witness that the rate of winding was very fast, that it was common to let down six yards in half an hour, the depth being 170 yards, and that the men were lowered faster than coals were drawn, whilst the rule was that they should be let down at half the rate. Several witnesses said constant complaints had been made of the winding going on so fast, and one said he had complained to the chartermaster, Hopley, but nothing seemed to have come of it. It was proved that the engineman, Bailey, had said he would let his men down quickly. The enquiry was adjourned.

An inquest was held on Monday as to the death of Benjamin Mellor, who was killed last week by a fall of coal at the High Carr Colliery, Tunstall, in North Staffordshire. A man working with the deceased was got out alive, but a second fall took place before Mellor could be rescued. The statement of Johnson shows the necessity for enforcing timbering by some other provision than the discretion of the men, who work by measure, and are often over-anxious to do their "stent" quickly. He said that seeing the coal "overhanging," he went to fetch a prop out of the main level (there being plenty of timber in the pit), and on his return he asked the deceased to spade the dirt out of the way. The deceased said it was as safe as a house, and he (witness) could not have the prop put up because Mellor would not cease working. William Scott, another witness, said that if the coal had been sprayed it would not have come down. The jury returned a verdict of "Accidental Death."

At the meeting of the North Staffordshire Waterworks Company, on Tuesday, Mr. George Baker, the Chairman, spoke of the great extension which the company had been required to make to supply the district. The original capital of the company, which it was difficult to raise, was 60,000l.—it was now 140,000l. He pointed out with much force the haste with which complaints were made if every house on every eminence was not constantly supplied with water, and also noticed that from the enormous assessment by the parishes on the proprietors of the company the rates they paid amounted to nearly 1 per cent. of their dividend. He also pointed out the great waste of water from letting taps leak, and that the annual dividend, at the rate of 6 per cent., was declared.

We visited the Deep Pit, Far Green, Hanley, the property of Earl Granville (says a correspondent of the *Staffordshire Advertiser*), and found that the managers were making preparations for sinking an additional shaft to the depth of 300 yards below the level of the present mine. To this end a cavernous excavation is being made, by blasting, in the solid rock a few hundred yards from the bottom of the shaft, and here it is intended to erect a powerful steam-engine for carrying on the contemplated deep workings by which the "hard mine" and other seams of that series are to be won. For the information of the curious, we may state that the present main shaft of the Deep Pit is just about four times as deep as St. Paul's is high, and that the new operations include the sinking of this shaft an additional 100 yards. When the new shaft in the pit has been completed the total depth will be considerably more than 800 yards.

#### REPORT FROM DERBYSHIRE AND YORKSHIRE.

MAY 23.—There is rather more doing in the Iron Trade in the southern part of Derbyshire, and nearly the whole of the furnaces are in blast, so that a good deal of pig is being turned out. Pipes, sheets, and hoops are in moderate request, and there is a more healthy tone pervading the district. The business doing in coal is limited, although a fair tonnage is being forwarded to London, where just now there is rather keen competition between the North Country coal on the one hand, and the Yorkshire and Derbyshire on the other. In the southern part of the district the South Yorkshire Association of Miners have succeeded in getting a number of the men to form a Union. To this the masters have given notice that no men will be allowed to work for them who have belonged to any association. A contest, which promises to be a very severe one, is expected; but in the present state of the trade there can be little doubt but what the coalowners will succeed. Thwarted at the large works at Staveley and Clay Cross, the Miners' Association have selected one of the smallest districts in Derbyshire as the scene for renewed operations. In the neighbourhood of Burton-on-Trent there are some seven or eight collieries, owned by the Marquis of Hastings, the Earl of Chesterfield, and other wealthy persons, and it is against those that the Miners' Union is expending its strength. Unfortunately for the objects desired, the season selected is one of the very worst, seeing that there are plenty of men working short time, who will be very glad to obtain situations where full time can be ensured. In the extreme south of Derbyshire a wealthy company are just

now engaged in sinking in the expectation of meeting with coal, although the place is quite outside the coal fields, as marked on geological maps. Should they succeed, of which there is a strong probability, it will afford good ground for testing other districts, and it is by no means certain that all the coal-yielding districts are defined. On the contrary, there is presumptive evidence that under certain formations, which have hitherto been considered as unmineral with certainty that coal cannot be underneath them, it can be found. The experiment now being made at Cotton Field is creating a great deal of interest, and its success will be rather disheartening to those who have so long been engaged in prophesying as to the time when our coal fields will be exhausted, and, as a consequence, England reduced to a fourth or fifth-rate power.

There is no alteration in the state of the Sheffield trades, the branches at all active being those connected with locomotive and other machinery—steel tyres, rails, axles, &c. There are a few orders to hand, and other tools for Russia, and the prospects of the foreign trade are better than they have been. Matters are looking better in South Yorkshire, and there are some fair orders in hand for sheets, hoops, pipes, and plates. At Mill and Elsecar, where the works have been all but closed for some time, owing to a great measure, to a dispute between the millmen and the Messrs. Dawson, working on what is termed the long-weight system, a settlement has been arrived at, by a timely concession on both sides. The mill-hands resumed work on Wednesday, and it is expected that the puddling will shortly do the same. The makers of plain and manufactured steel continue busy, there being plenty of orders in course of execution, both for home consumption and exportation.

The Coal Trade continues quiet, and many of the collieries are working short time. To London and the South there is about an average business being done in Silkestone, and the best qualities of the Barnsley seam, the export trade is rather better than it has been, but it is far from brisk; still, the northern ports are now open, and steam and sailing vessels having commenced running the usual summer trips, a good demand is anticipated as season advances. To the cotton districts of Lancashire a fair quantity of engine fuel is being forwarded, and of "hards" to the ironworks on the Lancashire side of the Trent. Coke continues to be enquired after, both for local consumption and export, but, owing to the comparatively limited quantity made, it is not sufficient to supply the ironworks in the home districts.

At the Oaks Colliery things remain unaltered, and there is no appearance of anything tending to indicate a speedy opening out of the workings. Of course, there is a good deal of grumbling by the relatives of those lying in the pit at what is considered by them as a delay for which there is no warrantable grounds, seeing that there is no change in the state of the shaft, which will, in all probability, be in the same condition, so far as gas is concerned, for they were two months ago. The shaft has at last been opened, and, fenced off, in connection with the shaft, for the relief of the miners by the two explosions at the Oaks and the Talke Collieries, it appears that the Mansion House Committee do not intend giving up the money subscribed for the public for them, and there is every appearance of a collision on the subject which in the interests of public charity would be much better avoided. The money was subscribed for a certain purpose, and why it should not be so applied seems strange, to say the least.

At the Swallow Hill Colliery, near Barnsley, which was inundated by the floods of last November, two of the shafts have been cleared, and the sinking of coal has been once more resumed.

RECKLESS COLLIERIES—WORKING IN A MINE WITH A NAKED LIGHT.—On Monday, at the Wakefield Court House, Wm. Coaling was charged with having violated and unsecured the safety of his safety-lamp. The case was employed in one of the pits of Messrs. H. Briggs, Son, and Co. (Limited), and on the day named he was found to have taken the gauge off his lamp in a place where, said Mr. Gill, who appeared for the prosecution, there was gas, where, therefore, there was danger. The Bench were asked to inflict a punishment that would be a warning, and sentenced the man to a month's imprisonment and 11s. costs.—On the same day, at the Court House, Dewsbury, Arthur Bowles was summoned for the violation of the rules of the Victoria Colliery, near Morley, the property of Mr. J. H. Light and another, inasmuch as he opened the door of a safety-lamp. Defendant pleaded guilty, but on the ground that he pressed his contrition, and promised not to do any more, Mr. Greenwood, however, thought it was a very serious offence, and, in the interests of the public, considered it would not be proper to take a lenient view of the case. Mr. Chadwick, for the owner of the colliery, suggested. The defendant was committed to prison for fourteen days, without the alternative of paying a fine.

#### MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

PENHALE WHEAL VOR.—I paid a visit to this mine on Wednesday having heard of the great improvement made in the 26 adit, on the new level. On entering the account-house my attention was attracted to a large pile of tin, about 2 cwt., which was broken from the level at same day. And what I saw of the lode broken, sent up, and spalled on Battery's floor. I estimated would produce fully 4 cwt. of tin to the ton of stuff. There can be but little question as to the value of this discovery, and from my experience I am fully persuaded the adventurers have now commenced the race in which they will stand tall in taking the leading prize.

CHIVERTON MOOR.—Much has been said of late as to whether rich West Chiverton lode passes through Chiverton Moor set or not, and during this week paid my first visit to the mine, perhaps you will allow me to state my impressions, and the result of my full enquiry. I will say, then, that it requires a personal visit to convince anyone at all conversant with mining matters—first, that this splendid lode does enter Chiverton Moor set direct, and passes through its entire length, simply because it cannot help doing so, in the absence of some most unusual convulsion of Nature, of which there is no evidence whatever; second, that the fine productive lode now being wrought in the lode in question—a view openly expressed at the meeting by the manager, the Chairman, and all who knew the mines best; and, third, that Chiverton Moor is on the eve of becoming a valuable productive property: the cutting of the lode in the cross-cut, at the engine-shaft, now daily expected, is the most resting event which has ever come off. If the West Chiverton lode does not take the direction I maintain it does, I think it would puzzle anyone to explain the most credulous (if seen on the spot), where else it possibly can go. I am everyone who wishes to hear a true estimate of the value of this fine property, now on the eve of triumph, to visit the set forthwith.

GREAT WHEAL FORTUNE.—There has been a great improvement in sinking a shaft on Tugg's lode, now valued at fully 30l. per fathom; sinking below the adit, at 19l. per fm. Tugg's lode is situated to the north of Cornard lode, which recently gave large profits, and Wheel Metal lode of Great Wheal Fortune.

WHEAL SETON is looking better than at any period during the past twelve months. The 150, 160, and 180 fm. levels west producing 25 tons of ore per fm., thus adding to the reserve of the mine.

WEST SETON.—This mine is looking exceedingly well; good dividends appear certain for a long time to come.

ROSEWALL HILL AND RANSOM UNITED.—These mines appear to be turning out more promising, as shown in the report in the Journal of May 4, wherein the several tunnel operations are valued in the aggregate at 275l. per ton. Since then the dip of tin has been overtaken in the 103, associated with four-spars, the exact matrix in which all the great deposits of tin have been found on the carbons in the St. Ives Consols. Rosewall and Ransom, without doubt, shortly occupy a very conspicuous position amongst the best mines in the neighbourhood, and may be fairly anticipated to rival the rich Providence—in fact, it is said the 90, east of Ransom, is and has been one of the best courses of tin ever met with in the district.

GRAMBLER AND ST. AUBYN.—The lode in the shaft has improved since the meeting, being now 5 ft. wide, composed of a beautiful soft spar, and of copper ore, and tin. From the resumption of the sinking of this shaft most favourable indications have been seen. Other points in the mine are also looking more favourable.

WEST WHEAL KITTY.—This mine is likely to turn out a great prize in this well-known tin district.

NORTH WHEAL CHIVERTON.—The lode in the 80 is opening out well, and the ground in the new engine-shaft is getting much easier for sinking, so that rapid progress can be made in approaching the rich lode gone down below the 80 fm. level.

WHEAL MARGERY (Uny Lelant) is sunk to the 150 fathom level, about 100,000l. has been spent in machinery, material, and labour in developing the property. At a meeting held at the account-house, on the 10th inst., it was suggested by a shareholder that the present number of shares, 700, should be multiplied into four times their present number, thus making the shares 2800, and that one-half of such shares be disposed of at 2l. per share, thus raising a capital of 2800l., which should be expended in working the mine before the old adventurers should be again called upon to contribute any further capital; that it was resolved that the purser be authorised to use the best means to carry out the above suggestion into effect; and that a special meeting be held on the 12th inst. to receive the purser's reports, and to pass such resolutions as may be necessary. It is also stated that there is to be a board of directors, to consist of London and Cornish shareholders, with such arrangements and with such chances of success as that mine holds out. There is not the least doubt that the shares will be eagerly sought for and readily taken up. It should be remembered that Wheal Margery is close by the Providence Mines, where such dividends have been, and still are, paid. In about 5 or 6 fms. sinking they expect to intersect the granite, where a rich lode of tin may almost be relied upon to be found, and the prospect is very bright. The mine is in the same district. Working at the adit level, where they have some fine defined tin and copper lodes, samples of which may be seen at the office of the company, 28, Great Winchester-street, London. It is computed they have from 20 to 30 tons of copper ore now on the surface, with some parcels of tin of rich quality. Few mines of this depth, and so cheaply worked, hold out better prospects than this concern.

INSTITUTION OF CIVIL ENGINEERS.—At the monthly ball of the following candidates were duly elected:—Messrs. John Daglish, George Baker, Foster, Charles Hawkey, William Wilson Hulse, Thomas Grainger Hurst, Robert Valentine John Knight, Dr. Manuel Barque de Macedo, and Dr. Francisco Pereira Passos, as Members; Messrs. Wilfred Airy, Henry John Card Anderson, Imrie Bell, Isaac Lowthian Bell, Lieut. Edward James Castle, R.E., Messrs. J. Timmins Chance, M.A., William Fothergill Cooke, Samuel Thomas Cooper, Baxter Cousins, Henry Halford Coventry, William Grey Ferrar, John Joseph Potts, Thomas Prosser, and Lieut. John Barnes Sparkes, as Associates.

The owners of the South Derwent Colliery have been fined by the Lancaster magistrates in the mitigated penalty of 5l., for employing a boy named George Handcock, under the age of 12 years, the boy not having a certificate from a competent schoolmaster that he was able to read and write. The boy, on the 26th April last, was found dead in the pit, and at the inquest it



one out that he was under the age of 12, and had not obtained the certificate required. Upon this, Mr. Verner, the Government Mine Inspector, reported the case to the Home Secretary, who directed the prosecution.

## MINES RATING BILL.

To THOMAS S. BOLITHO, Esq., HIGH SHERIFF OF CORNWALL.

WE, the UNDERSIGNED, INHABITANTS of the COUNTY of CORNWALL, REQUEST YOU TO CONVEY A PUBLIC MEETING of the inhabitants of the county, to CONSIDER the PROVISIONS of the MINES RATING BILL, now before Parliament:—

Dated 20th May, 1867.

**PENZANCE.—Continued.**

RICHARD V. DAVY, pursuer of Balles-widder.

WILLIAM BOLITHO, merchant.

EDMUND DAVY, merchant.

HENRY DAVY, merchant.

EDWARD BOLITHO, banker.

T. H. BODILLY and SON, merchants.

RALPH H. BODILLY, merchant.

NICHOLAS B. DOWNING, bank manager.

JOHN THOMAS, Jun., farmer.

M. NOWELL PETERS, vicar, Madron.

JOHN ROSCORLA, solicitor.

WILLIAM TRYTHALL, solicitor.

JOHN N. R. MILLETT, solicitor.

JOHN COULSON, merchant.

BORLASE and MILTON, solicitors.

E. H. RODD, solicitor.

THOMAS CORNISH, solicitor.

H. H. CORNISH, solicitor.

S. YORK and SON, merchants.

JOHN MAXWELL.

R. M. BRANWELL and SON.

THOS. JAMES, hotel keeper.

ST. JUST.

S. H. JAMES, pursuer of Botallack.

RD. THOMAS.

WILLIAM ANGIN, mine pursuer.

JOHN WALLIS.

S. H. JAMES, Jun., mine pursuer.

JOHN C. BARWIS, bank manager.

JOHN WARREN, printer.

JAMES TREMBATH, Mayor House, Sennen.

RICHARD BOYNS, bank manager.

WM. TREZISE, Trewellard House, MARAZON.

R. R. MICHELL, tin smelter.

THOS. W. FIELD, mine pursuer.

R. G. MICHELL, Mayor of Marazion.

R. M. MILLETT, merchant.

REDRUTH.

JOHN C. LANYON.

FRANCIS PRYOR.

ELIAS DUNSTONVILLE.

JOHN HOCKING and SON.

JOHN KENDALL.

GEORGE A. MICHELL, surgeon and pursuer of mines.

THOMAS RICHARDS, pursuer of mines.

JOHN L. PETER, solicitor.

S. T. G. DOWNING, solicitor.

HENRY GRYLIS, banker.

WILLIAM M. GRYLIS, banker.

FRANCIS PROY, pursuer of mines.

R. H. HOLLOWAY, solicitor and pursuer of mines.

J. W. HAWKESLEY, rector of Redruth, and owner of dues.

F. SYDNEY DAVEY.

HAYLE.

HARVEY and Co., ironfounders and merchants.

WM. HARVEY, merchant.

W. J. RAWLINGS, merchant.

WM. WEST, merchant.

FRANK HARVEY, merchant.

SANDYS, VIVIAN, and Company, ironfounders and merchants.

JOHN POOL, merchant.

HANL. ELLIS, merchant.

J. H. TREWTHICK and SONS, merchants.

WM. HOSKEN and SON, millers.

WM. HOSKEN, merchant.

C. and J. T. ELLIS, brewers.

ST. IVES.

THO. TREWEEK, mine pursuer.

R. H. BAMFIELD, solicitor.

WILLIAM HITCHENS, solicitor.

C. C. GREENFIELD, banker.

WILLIAM CADE, draper.

G. TREWEEK.

HELSTON.

FREDERICK HILL, solicitor.

T. P. TYACKE, solicitor.

FREDERICK V. HILL, solicitor.

H. E. LANYON.

HENRY ROGERS, solicitor.

JOHN BEST.

WILLIAM DALE, solicitor.

JAMES CUNNACK.

HENRY ROBERTS.

JOHN JAMES.

J. G. PLOMER, solicitor.

J. WEARNE, surgeon.

H. W. BORLASE.

ALFRED CREWES.

WILLIAM CHAPPELL.

JAMES CLARKE and Co., merchants.

WILLIAM ROWE and Co., carpenters.

THOMAS ELLIS.

W. B. FORFAR, solicitor.

WILLIAM PENROSE.

R. QUINTRALL.

H. N. GRIMLEY.

THOS. H. EDWARDS.

WILLIAM SLEEMAN.

C. D. DANIELL.

WILLIAM TREVENEN.

JOHN POOL, Jun.

J. TREDINNICK.

R. ROSEWARNE.

WILLIAM OATS.

JOHN CARTER.

JOHN SIMONS.

JOHN KENDALL.

ST. AUSTELL.

EDMUND CARLYON, solicitor.

ST. COLUMB.

GEORGE B. COLLINS, solicitor.

PALMOUTH.

HARRY TILLY, solicitor.

ROBT. R. BROAD, merchant.

## CORNWALL COUNTY MEETING.

## MINES ASSESSMENT BILL.

In consequence of the foregoing requisition to me, to convey a GENERAL MEETING of the INHABITANTS of the COUNTY of CORNWALL, to take into consideration the provisions of the MINES ASSESSMENT BILL, now before Parliament, I hereby convene such meeting, to be holden at the TOWN HALL, TRURO, on FRIDAY next, the 24th Inst., at One P.M. precisely.

THOS. S. BOLITHO, High Sheriff.

Dated at Penzance, this 20th day of May, 1867.

Just published, in three vols., medium 8vo., with above 2000 woodcuts, price £4 14s. 6d. cloth, or £5 12s. half bound in Russia.

**THE DICTIONARY OF ARTS, MANUFACTURES, AND MINES**, containing a Clear Exposition of their Principles and Practice. Sixth edition, chiefly rewritten and greatly enlarged. Edited by ROBERT HUNT, F.R.S., Keeper of Mining Records; Assisted by numerous Contributors eminent in Science and familiar with Manufactures.

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**NOTES ON THE MINES OF THE RIO TINTO DISTRICT:** Containing a DETAILED REPORT upon the MINES and on the MEANS of RENOVATING THEM MORE PROFITABLE, as well as an ACCOUNT of the PROCESS of TREATING POOR ORES of COPPER, successfully used there. By JOSEPH LEE THOMAS, Assoc. I.C.E.

London: MINING JOURNAL OFFICE, 26, Fleet-street, E.C.

**TO COLLIERY AND IRONWORKS PROPRIETORS.** PATENTERS, and ADVERTISERS of every class, who wish to address themselves to the COLLIERY, IRONWORKS, MINERAL PROPRIETORS, and MERCHANT GUARDIAN, established in 1832, and which is the leading journal in South Wales. A series of advertisements inserted on liberal terms. Address, G. W. JONES, General Manager, Cardiff and Merthyr Guardian Office, John-street, Cardiff.

**ROBERT LIBBY AND SON** MINN and SHAREDEALERS, CAMBORNE, CORNWALL.

## Barrack Contracts for the Supply of Coals, Coke, and Turf, in Great Britain and Ireland.

WAR OFFICE, PALL MALL, LONDON, S.W.



**NOTICE IS HEREBY GIVEN**, that the Secretary of State for War is PREPARED TO RECEIVE TENDERS for the SUPPLY of COALS, COKE, AND TURF, at the various Barrack Stations in Great Britain and Ireland for a period of nine months from the 1st July next.

Tenders will not be entertained unless made upon the proper printed form, which may be obtained, with every requisite information, upon application at this office, or to the various Barrack Masters, between the hours of Ten and Four o'clock each day, Sundays excepted.

The tenders must be sent to this office, addressed to the Director of Contracts, marked on the outside, "Tender for Coals, &c.," on or before Saturday, 1st June, 1867, after which day no tender will be received. The Secretary of State for War reserves the right of rejecting any or all of the Tenders.

THOMAS HOWELL, Director of Contracts.

War office, Pall Mall, London, S.W., May 20, 1867.

## India Office—Contract for Iron.

BY ORDER OF THE SECRETARY OF STATE FOR INDIA IN COUNCIL.



**NOTICE IS HEREBY GIVEN** that the DIRECTOR-GENERAL OF STORES FOR INDIA will be READY, on or before Monday, the 3d June next, to RECEIVE PROPOSALS, in writing, sealed up, from such persons as may be willing to SUPPLY—

BEST BRITISH IRON.

And that the conditions of the said contract may be had on application at the India Store Office, Cannon-row, Westminster, where the proposals are to be left any time before Two o'clock P.M., of the said 3d day of June, 1867, after which hour no tender will be received.

GERALD C. TALBOT, Director-General.

India Office, May 27, 1867.

## India Office—Contract for Copper.

BY ORDER OF THE SECRETARY OF STATE FOR INDIA IN COUNCIL.



**NOTICE IS HEREBY GIVEN** that the DIRECTOR-GENERAL OF STORES FOR INDIA will be READY, on or before Monday, the 3d June next, to RECEIVE PROPOSALS, in writing, sealed up, from such persons as may be willing to SUPPLY—

BOLT AND SHEET COPPER.

And that the conditions of the said contract may be had on application at the India Store Office, Cannon-row, Westminster, where the proposals are to be left any time before Two o'clock P.M. of the said 3d day of June, 1867, after which hour no tender will be received.

GERALD C. TALBOT, Director-General.

India Office, May 27, 1867.

## In the Landed Estates Court, Ireland.

## QUEEN'S COUNTY.

IN THE MATTER OF THE ESTATE OF NICHOLAS STEPHENSON MAY, Owner; JOHN HAMILTON, Petitioner.

**TO BE SOLD, BY AUCTION**, in One Lot, on Friday, the 21st day of June, 1867, before the Hon. Judge Dobb, at the Landed Estates Court, Inns Quay, Dublin, the LIFE ESTATE of the owner, NICHOLAS STEPHENSON MAY, in the COAL MINES in and under 55 A. 3 R. 31 P. Irish plantation measure; PART OF THE LANDS OF BALLYLEHANE, called MODU-BEAGH or BAMBRICK'S MOUNTAIN, together with the ENGINE-HOUSE at TILLY'S PIT, ONE-HALF of said TILLY'S PIT, ONE-HALF the LADDER PIT, and TWO DWELLING-HOUSES near Tilly's Pit, all situate in the barony of Ballydams, and Queen's County.

GEORGE T. HOPKINS, Chief Clerk.

Dated this 17th day of May, 1867.

**DESCRIPTIVE PARTICULARS.**

The Modubeach Colliery is situate in the townland of Ballylethane Upper, in the barony of Ballydams, and Queen's County. The portion to be sold contains 55 A. 3 R. 31 P. Irish plantation measure, or thereabouts.

The estate originally contained 183 acres Irish, and the colliery was profitably worked for a long period.

The colliery has been recently partitioned by the Landed Estates Court. It lies adjacent to the well-known Wolf Hill Colliery, which is in full operation, and yields a good supply of free-burning anthracite coal.

The Modubeach Colliery is of easy access, there being excellent county roads passing directly through it, leading to Naas, Carlow, Castlecomer, Abbeyleix, Ballinakil, Maryboro', &c., and it is but nine miles from the Athy Station on the Great Southern and Western Railway.

For rentals and further particulars apply at the Registrar's Office, Landed Estates Court, Dublin, or to THOMAS CRAIG, solicitor having the carriage of sale, 30, South Frederick-street, Dublin.

## COAL CUTTING MACHINERY.

**THE COLLIERY PROPRIETORS OF SOUTH LANCASHIRE AND CHESHIRE**, being anxious to ENCOURAGE the DEVELOPMENT of

## COAL CUTTING BY MACHINERY,

Have determined to offer—

THREE PRIZES—viz., £500, £200, AND £100,

For the FIRST, SECOND, and THIRD BEST MACHINE respectively, which in the opinion of the Committee appointed for that purpose, shall be most suitable for the requirements of the trade; and the inventor of which shall comply with the regulations laid down by the Committee.

A copy of the regulations, and further particulars, will be furnished on application to the undersigned.

All competitors must furnish the machines intended for trial, in Lancashire, and later than the 1st November, 1867.

MASKELL WM. PEACE, Wigan, Law Clerk to the Association.

February 11, 1867.

## TO COAL OWNERS AND OTHERS.

**THE LONDON PATENT COAL COMPANY** are now GRANTING LICENSES for the USE of their PATENT for the UTILIZATION of COAL DUST. All communications to be addressed to the Managing Director, 26, Martin's-lane, Cannon-street, E.C.

## ANGLO-MEXICAN MINT OFFICE.

The directors of the ANGLO-MEXICAN MINT COMPANY beg leave to notify to the shareholders that a DIVIDEND will be PAYABLE at the office, as above, on and after MONDAY, the 3d June next. Claims to be made (by filled forms of which may be obtained at the office) two clear days previous to payment.

Attendance Eleven to Three o'clock.

ALFRED GODFREY, Secy.

4, Finsbury-place, S., London, May 23, 1867.

## THE MINERAL RIGHTS ASSOCIATION (LIMITED).

Notice is hereby given, that the FIRST ORDINARY GENERAL MEETING of the shareholders in the Mineral Rights Association (Limited) will be HELD at the office of the company, No. 8, Austinfriars, London, on THURSDAY, the 30th day of May inst., at Two o'clock precisely.

The directors' report and the accounts will be circulated among the shareholders previous to the day of meeting.

By order of the Directors, E. ASHMEAD, Secretary.

8, Austinfriars, London, May 20, 1867.

## THE WEST CANADA MINING COMPANY (LIMITED).

Notice is hereby given that the EIGHTH ORDINARY GENERAL MEETING of the Shareholders of this Company will be HELD at this Office, on FRIDAY, the 31st day of May inst., at Twelve o'clock at noon precisely, to receive the reports and accounts for the year ending the 31st of December, 1866, and for general purposes, as authorised by the Articles of Association.

Two directors—viz., Thomas Close, Esq., and William Gladstone, Esq., will retire from office at this meeting by rotation. They are both eligible, and purpose offering themselves for re-election.

The auditor, Joseph George, Esq., will also retire from office, but will offer himself for re-election.

By order of the Board, W. G. WILLIAMS, Secretary.

6, Queen-street-place, London, E.C., May 21, 1867.

## THE DE LERY GOLD MINING COMPANY

GENERAL OFFICES: No. 74, CEDAR STREET, NEW YORK; and No. 46, PETER STREET, QUEBEC, CANADA.

This company has PURCHASED all the MINERAL RIGHTS on the Seignior of RIGAUD-VAUREUIL, in the Province of QUEBEC, and about June 1 will COMMENCE PRACTICAL OPERATIONS, by making mineralogical surveys, by shafting and tunnelling the quartz ledges, and by testing the quality of the rock in their stamp-mill just completed. The area of the Seignior is 108 square miles, and the quartz veins are of unusual width and extent in separate organisations; and as fast as the company's surveys and tests shall show the best locations for new mills, they will furnish maps, and propose liberal terms to parties desiring to develop mines on their own account. Contracts are now being made for the working of Placer Mines, which have already been abundantly proven to be of great richness.

Full information can be obtained at either office of the company, or of the local agent, Mr. TRUMAN COMAN, on the property.

Quebec, May 6, 1867. J. M. WINCHELL, General Manager.

## BRITISH SLATE COMPANY DIVIDENDS.

As this Nine per Cent. Dividend is permitted to remain in the Dividend List of the Mining Journal, "A Man of Experience" continues his warning to investors, that it is wholly impossible for this company's quarries to declare this dividend out of profits fairly earned. The company has been repeatedly challenged since last March to show in figures the tonnage of slates and slabs raised by them in 1866; also the amount of their dividend last declared actually paid in cash to their shareholders; and to state what would be their balance then on hand after payment of all debts. They have been, and are, wholly unable to produce any explanation or defence of the dividends they have declared.

## RAILWAY WAGON WORKS, BARNESLEY.

MESSRS. G. W. AND T. CRAIK are PREPARED TO SUPPLY COAL AND COKE WAGONS of EVERY DESCRIPTION, either for cash, or by preferred payments through wagon-leasing companies. WAGONS PROMPTLY REPAIRED.

## NOTICE TO THE CONSUMERS OF THE GENUINE SWEDISH DANNEMORA IRON

I beg to announce that I have this day ENTERED into a CONTRACT with Messrs. W. JESSOP and SONS, of SHEFFIELD, for the WHOLE ANNUAL MAKE of the above IRON, which, in future, will be stamped

LEUFSTA W. JESSOP AND SONS,

And to which I request the special attention of the Trade. CARL EMANUEL DE GEER, Proprietor. Leufsta, in Sweden, 29th April, 1867.

MESSRS. W. JESSOP AND SONS, in referring to the above announcement, beg to inform consumers that the genuine

LEUFSTA W. JESSOP AND SONS

IRON can ONLY be OBTAINED from them, and that they are PREPARED to SUPPLY the TRADE on LIBERAL TERMS.

At the same time, W. JESSOP AND SONS wish to CAUTION dealers in foreign irons against spurious imitations of the whole or any part of their genuine Brand, as W. JESSOP AND SONS are resolved, in case of infringement, to protect their own and the proprietor's rights in the same.

PARK AND BRIGHTSIDE STEELWORKS, SHEFFIELD, April, 1867.

## CHARLES J. SPENCER AND CO., ENGINEERS AND CONTRACTORS,

No. 4, QUEEN STREET PLACE, CANNON STREET, LONDON, E.C.

**HORIZONTAL ENGINES**, of all sizes, suitable for WINDING and other COLLIERY PURPOSES, kept in stock, and made to order. ESTIMATES AND PLANS given for BOILERS, SHAFING, MACHINERY, &c.

## HERBERT AULT, ENGINEER,

DRAUGHTSMAN AND PATENTEES' ASSISTANT,

VALUER OF MACHINERY, IRONWORKS, RAILWAY and COLLIERY PLANT, and other works. DESIGNER and CONTRACTOR for every description of RAILWAY and COLLIERY PLANT, CONTRACTORS' and other LOCOMOTIVES, HOT AIR and HOT WATER APPARATUS, &c.

Preparer of models &c., for patents, and every other assistance given upon the most moderate terms. Estimates given for taking down and erecting works and other machinery.

Applications addressed to HERBERT AULT, Netherton, near Dudley, will meet with prompt attention.

N.B.—HERBERT AULT begs to call the attention of gentlemen about to put up greenhouses or conservatories to his large assortment of designs at exceedingly low prices.

## BOWLING IRON COMPANY,

BRADFORD, YORKSHIRE.

**BEST CRUCIBLE CAST-STEEL TYRES, AXLES, CRANK AXLES, BOILER PLATES,**

Also COG WHEELS, and other CASTINGS.

This company is prepared to furnish the above-mentioned articles in CAST STEEL of a very superior quality, made principally from their own well-known "BOWLING IRON."

Also BOWLING WROUGHT-IRON SOLID WELDLESS TYRES, of any size and to any section.

## BAGILLT OIL COMPANY (LIMITED),

FLINT.

## MANUFACTURERS OF BLACK GREASE

FOR COLLIERY WIRE ROPES, TRAMS, WAGONS, &c., £5 PER TON.

TORCH AND LAMP OIL, 1s. PER GALLON (Casks free).

LUBRICATING OIL, 1s. PER GALLON (Casks free).

## GLAHOLM AND ROBSON,

HENDON PATENT ROPE, SUNDERLAND,

MANUFACTURERS OF ALL DESCRIPTIONS OF STEEL IRON, and HEMP ROPES for COLLIERIES, SHIPS, &c.

## MASSIVE HORIZONTAL ENGINE, 14 in. cylinder, 24 in. stroke,

top steam chest, governor, pump; fly-wheel 8½ ft. diameter, 29 cwt.; throttle and shut valves, metallic piston, wrought-iron (forked) connecting-rod, piston-rod, cross-head, and fly-wheel shaft, 4½ in. diameter, 7 ft. long. This engine is constructed on the most approved principles, of the best materials, highest class of workmanship, and warranted.

DITTO, 16 in. cylinder, in progress.

DITTO, 18 in., nearly finished.

DITTO, 20 in., in progress.

All of the same class of workmanship, materials, finish, and design, and warranted.

Photographs and particulars on application to WHEATLEY KIRK, Engineer and Valuer, 8, Essex-street; Stores, 21, Old Garratt, Manchester.

(For other Engines and Machinery, see his Monthly Circular, free on application.)

## NICHOLLS, MATHEWS, AND CO., ENGINEERS,

BEDFORD IRONWORKS, TAVISTOCK.

MANUFACTURERS OF STEAM ENGINES of EVERY DESCRIPTION, made on the BEST and NEWEST PRINCIPLES. We beg more especially to call the attention of the public to the MANUFACTURE of our BOILERS, which have been tested by most of our leading engineers. PUMP WORK CASTINGS of EVERY DESCRIPTION, both of brass and iron. HAMMERED IRON and HEAVY SHAFTS of ANY SIZE. CHAINS made of the best iron, and warranted. MINERS' TOOLS and RAILWAY WORK of EVERY DESCRIPTION.

ALL ORDERS FOR ABROAD RECEIVE their BEST ATTENTION. NICHOLLS, MATHEWS, and Co. have had 20 years' experience in supplying machinery to foreign mines, and selecting experienced workmen to erect the same, where required.

Messrs. NICHOLLS, MATHEWS, and Co. have always a LARGE STOCK of SECOND-HAND MINE MATERIALS in stock, and at moderate prices.

## WILLIAMS'S PERRAN FOUNDRY COMPANY,

PERRANARWORTHAL, CORNWALL.

MANUFACTURERS OF STEAM PUMPING and EVERY OTHER KIND of ENGINES, together with BOILERS, PUMP CASTINGS, and MINING TOOLS of every description, of the very best quality. Estimates given for the supply of any amount of machinery.

London Agent.—Mr. EDWARD COOKE, 76, Old Broad-street, London, E.C.

## CHAPLIN'S PATENT STEAM ENGINES AND BOILERS,

OF EVERY CLASS, FOR SALE OR HIRE, at the

ENGINEERING WORKS,

No. 19, CORNWALL ROAD, LAMBETH, LONDON, S.

(Opposite Waterloo Railway Station.)

## RAILWAY CARRIAGE COMPANY (LIMITED)

ESTABLISHED 1847.

OLDBURY WORKS, NEAR BIRMINGHAM.

MANUFACTURERS OF RAILWAY CARRIAGES and WAGONS, and EVERY DESCRIPTION OF IRONWORK.

Passenger carriages and wagons built, either for cash or for payment over a period of years.

RAILWAY WAGONS FOR HIRE.

CHIEF OFFICES.—OLDBURY WORKS, NEAR BIRMINGHAM.

LONDON OFFICES.—6, STOREY'S GATE, GREAT GEORGE STREET, WESTMINSTER.

## THE BEVERLEY IRON AND WAGON COMPANY

(LIMITED).

MANUFACTURERS OF RAILWAY CARRIAGES and WAGONS, WROUGHT and CAST IRON CARRIAGE and WAGON WHEELS, AXLES, HAMMERED IRON, and HEAVY SMITHS' WORK for ENGINEERS, &c. BRASS and IRON FOUNDERS. MAKERS OF PORTABLE FARM RAILWAYS, TURN-TABLES, CROSSINGS, SWITCHES, &c. AGRICULTURAL MACHINISTS. MANUFACTURERS OF FIELD, ROAD, and BARN IMPLEMENTS. PATENT LORRY, CART, and CARRIAGE WHEELS, with WOOD or IRON NAVES. REAPING MACHINES, CLOD CRUSHERS, CORN MILLS, &c. SAW MILL PROPRIETORS. GENERAL TIMBER CONVERTERS for home and foreign RAILWAYS, STATIONS, BARRACKS, EXHIBITIONS, &c.

IRONWORKS BEVERLEY, YORKSHIRE.

## THE BIRMINGHAM WAGON COMPANY (LIMITED)

MANUFACTURE RAILWAY WAGONS of EVERY DESCRIPTION, for HIRE and SALE, by immediate or deferred payments. They have also wagons for hire capable of carrying 6, 8, and 10 tons, part of which are constructed specially for shipping purposes. Wagons in working order maintained by contract.

EDMUND FOWLER, Secy.

WAGON WORKS.—SMETHWICK, BIRMINGHAM.

Loans received on Debenture; particulars on application.

London Agent.—Mr. E. B. SAYLE, 67, Victoria-street, Westminster, S.W.

## STAFFORDSHIRE WHEEL AND AXLE COMPANY

(LIMITED).



## In Chancery.

In the MATTER of the STOWE IRON ORE COMPANY (LIMITED), and in the MATTER of the COMPANIES ACT, 1862.

MR. WILLIAM WARD ABBOTT is instructed to SELL, BY AUCTION, at the New Auction Mart, Tokenhouse-yard, London, on Wednesday, the 31st day of June next, at Twelve o'clock, pursuant to an Order of the High Court of Chancery made in the above Matter, bearing date the 31st day of May, 1867, and with the approval of His Lordship the Master of the Rolls, the Judge to whose Court this Matter is attached, certain

## MINES ON THE ESTATE OF STOWE NINE CHURCHES,

Near WREDDON, in the county of NORTHAMPTON, near the London and North-Western Railway, about eight miles from Northampton, and connected with the railway by a tramway, comprised in a lease bearing date the 15th of June, 1861, made between the Corporation of the Sons of the Clergy of the one part, and Wordsworth Harrison, Alexander Kelly the younger, Wallace Pedder, John Robinson Pedder, and Whitton Arundell of the other part, whereby the said premises were demised to the said lessees for the term of 14 years, from the 23rd January, 1861, at the yearly rent for every acre of the surface of the said land and premises occupied by the lessees, or rendered by them unavailable for farming purposes, of 25, and at the further annual rent after the first six years of the said term of 1000 (such rent being minimum rent and payable quarterly, and subject to royalties on the excess in any quarter of a year of 6d. per ton of iron ore, yellow ochre, and sand, and 4d. per ton of limestone).

The MINES and PREMISES now offered for sale comprise all mines, pits, quarries, veins and beds of ironstone, yellow ochre, and limestone, and sand, in and under all those several closes, pieces, or parcels of land, containing together about 1730 acres, belonging to the Governors of the said Charity, and being the whole of their landed estate in the parish of Stowe Nine Churches aforesaid, and the use jointly with the lessees of the said tramway in connection with the siding on the main line of the said railway.

Particulars will be ready 21 days prior to the sale, and may be had gratis of the Official Liquidator, Mr. JOHN WALKER FORD, No. 8, Walbrook, City; Messrs. PARKER, ROOKE, and PARKERS, No. 17, Bedford-row, London; Messrs. PARKER and SALMON, Ulverstone, Lancashire; and of the Auctioneer, Mr. WILLIAM WARD ABBOTT, No. 26, Bedford-row, London, and Eynesbury, St. Neots.

ROBERT MARSHALL, Chief Clerk.

PARKER, ROOKE, AND PARKERS, No. 17, Bedford-row.

(Solicitors for the Official Liquidator.)

Dated this 31st day of May, 1867.

## WEST SHARP TOR MINE, LINKINHORNE, CORNWALL.

MESSRS. WARD AND CHOWEN WILL SELL, BY AUCTION, on Tuesday, the 4th day of June, 1867, at One o'clock in the afternoon, the undermentioned VALUABLE and EXTENSIVE MACHINERY and MATERIALS, at WEST SHARP TOR MINE, in the parish of Linkinhorne, Cornwall, viz.:

ONE 50 in. cylinder STEAM PUMPING ENGINE, 9 ft. stroke in the cylinder, and 8 ft. in the shaft, with TWO 11 ton BOILERS, in very good condition.

ONE 14 in. HORIZONTAL WINDING ENGINE, 4 ft. stroke, with ONE 6 ton BOILER.

150 ft. shears, with pulleys, &c., complete; 110 fms. of 11 in. capstan rope, 82 fms. 3/4 in. whim chain, 112 arm capstan, 1 8 arm ditto, 100 fms. of 2 1/4 in. flat-rods, best iron, complete; 400 fms. of 3/4, 9-16ths, and 1/2 in. whim chain; 60 fms. of 1 1/2 in. bucket rods, 400 fms. tram iron, 160 fms. main shaft rods, with strapping plates and bolts, complete; 200 fms. 7 in. air pipes (tin), 40 fms. cast-iron ditto, 200 fms. ladde, 2 3/4 in. 20 in. pumps, 11 9 ft. 14 in. pumps, 11 9 ft. 13 in. ditto, 4 9 ft. 12 in. ditto, 15 9 ft. 9 in. ditto, 73 9 ft. 8 in. ditto, 1 9 ft. 12 in. windbore, 1 4 ft. 10 in. flat bottom ditto, 1 6 ft. 9 in. ditto, 1 5 1/2 ft. 9 in. ditto, 1 4 ft. 8 in. ditto, 2 9 ft. 8 in. sinking windbores, 4 7 in. windbores, various lengths; 2 6 in. sinking windbores, 1 5 in. windbore and matchings, 1 10 ft. 12 in. working barrel, 1 9 ft. 7 in. ditto, 1 10 ft. 7 in. ditto, 1 11 ft. 2 6 ft. 14 in. matchings, 8 13 in. matchings, various lengths; 1 bevil matching, 5 8 in. matchings, 1 12 in. H piece, 1 9 in. ditto, 3 8 in. ditto, 1 5 in. ditto and doors, 1 1 1/2 in. door, complete; 1 9 in. ditto ditto, 6 8 in. ditto ditto, 2 12 1/2 in. ditto ditto, 1 12 ft. 14 in. plunger pole, stuffing box and glands complete; 1 1 1/2 ft. 12 in. ditto ditto, 1 9 1/2 ft. 9 in. plunger pole, ditto ditto, 1 11 ft. 9 in. ditto ditto, 1 10 ft. 8 in. ditto ditto, 1 9 ft. 8 in. ditto ditto, 1 9 ft. 5 in. ditto ditto, 1 10 ft. 15 in. pole case, 1 11 ft. 13 in. pole case, 1 9 ft. 11 in. pole case, 1 9 ft. 10 in. ditto, 2 10 ft. 9 in. ditto, balance and angle bobs, with brasses and saddles, complete; 4 shaft cisterns, shaft gill, surface and underground tram wagons, tram saddles, tram wheels, new and old iron, castings for 2 small balance-bobs, 55 pulleys of various sizes, quantity of old and new brass, poppet heads, 65 shaft rods, flange pins, 27 sets of strapping plates, 2 pair of cap plates, 1 large sword and joint, quantity of saddles and top locks, machine, winze, and horse whim kibbles, crab winch, 2 sets of blocks, knocker line, 40 in. smiths' bellows, 11 in. ditto, 6 tons of useful iron, 6 tons of scrap iron, staples and glands, pick moulds, pump rings, spanners, the whole of the smiths' tools, carpenters' shop and bench, dressing sheds and tools, new oak and Norway timber, miners' tools and chests, 400 lbs. of powder, 150 coils of safety-fuse, 4 new oak wings to main rods, about 1 ton of boiler steel, miners' dial, 2 oak caps for shears, &c.

The above will afford a good opportunity to mining speculators and others, the machinery and the whole of the materials being of first-rate quality, and in good condition.

The mine is situated about 7 1/2 miles from Liskeard, 8 from Callington, and is close to the Liskeard and Callington Railway, whence the materials could be conveyed either to Liskeard or the port of Looe.

Catalogues, descriptive of each lot, may be obtained on and after the 27th inst., either of Mr. BUCKLEY, 22, Great St. Helen's, London, E.C.; Capt. W. RICHARDS, on the mine; or of the Auctioneers, Uppaton, Milton Abbot, Tavistock, Devon. Refreshments at Twelve o'clock. — May 31, 1867.

## FOR FINAL SALE ON WEDNESDAY, MAY 23, 1867,

At Eleven o'clock in the forenoon,

## AT WHEEL REETH, NEAR ST. IVES ROAD STATION.

An omnibus will start from Mr. White's, Pendarves Arms, Redruth, at half-past Seven A.M. precisely, calling at Tyack's Hotel, Camborne, Crotch's Hotel, Hayle, to meet the train at 9 1/2 A.M., and to St. Ives-road station, to meet the up train at 9 29 A.M.

MR. BURGESS, Land and Machinery Valuer, is instructed to offer for SALE, BY PUBLIC AUCTION, the whole of the valuable ENGINES, MACHINERY, PITWORK, TIN LEAVINGS, and HALVANS, on that extensive tin mine WHEEL REETH, Lelant, near the St. Ives-road Station, comprising—

Superior 40 in. cylinder pumping ENGINE, 9 ft. stroke, with 2 10 ton boiler and fittings.

30 in. cylinder pumping or man ENGINE, 9 ft. stroke, equal beam, 1 boiler

10 tons, with all necessary attachments for the said man engine.

20 in. cylinder whim ENGINE (double), 8 by 7 ft. stroke, with a first-class

12 ft. cage for wire rope.

30 in. cylinder stamping ENGINE, with 2 12 head axles, 14 head Crabs' axle.

Superior balance bob at Stephens' 40 in. engine, complete; ironwork of an

underground bob, best fagotted straps, flat thread top staples, &c., complete;

1 small balance bob; rod plates, short and long; hammered caps; large ham-

mered sword, 20 ft. long; 3 in. bar; tram iron; shaft tackle; 45 fms. 9 in. pumps;

60 fms. 7 in. plunger lifts, 15 fms. 6 in. ditto; 6, 7, 8, and 9 in. plunger bottoms,

poles, stuffing boxes and glands in first-rate condition; 8 skips; 1 4 in. pole,

stuffing box and gland; fagotted main caps for man engine works; a quantity

of staples and glands, perfectly topped and screwed to fit, 5, 6, 7, 8, and 9 inch

rods; 2, 3, and 4 ft. shivers; new tram wagon wheels; flange bolts; chain; shaft

rolls; plunger blocks and saddles; tramroad iron; plates and taps; 6, 7, 8,

and 9 inch bucket rods.

STONE ROOM.—Wine kibbles; 3/4 and 3/8 new bore steel; new square point

steel shovels, new round ditto; new winze rope and lashing; new gaskets; pick

and shovel bits; tin cans and scoops.

INSIDE STORE.—Casting furnace; candle chest; brass and sundry materials;

2 brass measuring chains; dial and quadrant, by Wilton; new oak winze water

barrels; air machine; 2 steam whim kibbles.

SMITHS' SHOP.—Smiths' bellows; 2 anvils, vice; smiths' tools, smiths' crane;

forge crane; clack plates; miners' tools; 3 hand screws; drop screw; chests;

3 ft. dry tube 45 ft. long.

CARPENTERS' SHOP.—Carpenters' bench 80 ft. long; double sawpit and frame;

air machine; cross-cut saw; pit saw; new and old barrows; sundry casting

patterns; old junk; several tons of wrought and cast-iron; rod bolts perfectly

topped; sundry other useful iron, new iron; 2 large beams and scales; miners'

chests and sundry wood.

SAMPLING HOUSE.—Bruising plates, bruising hammers and dry pans; trying

pots and tools; tin scales, &c.

EASTERN MINE AND STAMPS.—Horned whim, 3 shivers, 2 kibbles; horse-whim

chain, shaft tackle.

TIN DRESSING FLOORS.—No. 1, shed, 40 ft. by 12; 4 hand frames, 10 ft. by 5 1/2,

and flooring; dressing tools, 6 trucks, 3 lime pits and divisions.—No. 2, shed,

36 ft. by 12; 3 hand frames.—No. 3, shed, 15 ft. by 12; 1 tin frame; 6 and 8 inch

leading launders to ditto; 13 self-acting frames, 11 feet long 5 1/2 wide; broom

machines.—No. 4, dressers' shed; 2 flushets to large catch pits; 12 ft. water

wheel, 15 in. breast; launders and stands; driving chain and 8 shivers; 9 trucks

and divisions; receiving pits and flushets; 10 trucks; 10 ditto; stamps strips;

1 1/4 in. flat rods for driving trucks.—No. 5, shed, 40 ft. by 12; 3 hand frames; 8

self acting frames, 11 ft. by 5 1/2; 200 fms. feed launders, 6 in. and upwards.—

No. 6, shed, 40 ft. by 15; 7 hand frames, 11 ft. by 5 1/2.—No. 7, shed, 30 ft. by 14.

Driving gear and chain for bidders; 2 stands and 15 shivers, 1 ft. to 2 ft. (light).

The engines and boilers having been fed and condensed with clear spring

water, will be found in superior condition.

All the tin leavings and halvans belonging to the adventurers of Wheel Reeth

Mines in one lot or together, with the stamping-engine and appliances.

This mine has been returning large quantities of very rich tin for over 20 years.

For inspection or treaty apply to Mr. BURGESS, land and machinery valuer,

Barnosec, Redruth. Refreshments as usual.

Dated Barnosec, Redruth, May 14, 1867.

## AN INDEX TO MINERALOGY:

By T. A. READWIN, F.G.S., F.S.S., &c.

Pp. 52. Price One Shilling.

London: E. and F. N. SPON, 48, Charing-cross. Manchester: John Heywood,

Deansgate.

This Index is an alphabetical list of about 2500 mineral substances, with con-

cise references to their composition, synonyms, and place in the British Museum.

## GUIDE TO INVESTORS.—MR. SPARGO'S "Guide to Investors"

for the present month contains Leading Articles on the Causes of Depreci-

ation in the Value of Mining Shares; the Bank of England and Banking;

Mines at Home and Abroad; a Tabular Statement of Banking, Mining, and

other Companies; City and Commercial Facts and Incidents; and a Price List

of Shares in Banks, Canals, Railways, Bridges, and Finance Companies. It

also contains Rate of Discount at Home and Abroad; together with necessary

detailed information connected with the Stock and Share Markets, Mines, and

Miscellaneous Companies. The City Article affords the most recent and

authentic information concerning the stock, share, and produce markets.

224 and 226, Gresham House, Old Broad-street, London, E.C., May, 1867.

## In the Court of the Vice-Warden of the Stannaries.

Stannaries of Devon.

IN the MATTER of the COMPANIES ACT, 1862, and of the SWINCOMBE VALE MINING COMPANY (LIMITED).—The Registrar of this Court has appointed WEDNESDAY, the 31st day of June next, at Eleven o'clock A.M., at the Registrar's Office, Truro, to SETTLE the LIST OF CONTRIBUTORIES of the ABOVE-NAMED COMPANY now made out and deposited at the said office. WILLIAM MICHELL, Registrar of the said Court.

Dated this 23rd day of May, 1867.

## In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WENDRON CONSOLS MINING COMPANY.—TO BE SOLD, under the direction of the Registrar of the said Court, BY PUBLIC AUCTION, on MONDAY, the 31st day of June next, at Eleven o'clock in the forenoon, at the WENDRON CONSOLS MINE, in the parish of Wendron, within the said Stannaries, either together or in lots, the MINE SETT or GRANT of the said company, and the undermentioned MINING MACHINERY AND MATERIALS, viz.: Two boilers, capstans, angle bobs, parts of V bobs, wood and iron staples, glands, and rod plates; one 70 in. and one 50 in. STEAM ENGINE with rod and woodwork; shears and shivers complete; capstan bobs and stands complete; steam whim engine 18 inch, with fly wheel, and one boiler 7 tons; whim cage, horse whim, and shaft tackle; a chain, bob centre, straps and block; horse-whim, 15 boxes and 5 cables, new and old kibbles, smiths' and miners' tools, ladders, rope stairs with handrail, doors and door cases, sashes and frames; and a variety of other articles and effects in general use in mines.

Further particulars may be had on application to Mr. JOHNS, the Officer of the Court in possession.

HODGE, HOCKIN, AND MARRACK, solicitors, Truro.

Dated Registrar's Office, Truro, May 15, 1867.

## In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the CRENER AND WHEAL ABRAHAM UNITED MINING COMPANY (LIMITED).—TO BE SOLD, under the direction of the Registrar of the Court, BY PUBLIC AUCTION, on Friday, the 14th day of June next, at Twelve o'clock at noon, at CRENER AND WHEAL ABRAHAM UNITED MINES, in the parish of Crowan, within the said Stannaries, subject to such conditions as shall be then and there produced, all the interest of the said company and of the MINE SETT or GRANTS, by virtue of which the operations of the company have been carried on, and the undermentioned MINING MACHINERY, PLANT, and MATERIALS, and EFFECTS, viz.:

WILSON'S ENGINE.

ONE 90 in. cylinder PUMPING ENGINE, 11 ft. stroke in cylinder, and 10 ft.

in shaft, including the connecting loops and first piece main-rod.

ONE BALANCE BOB.

FIVE 14 in. BOILERS, with fittings.

112 in. hoist lift, 32 fms. long.

118 in. plunger lift, 45 fms. long.

118 in. plunger lift, 35 fms. long.

118 in. drawing lift, 20 fms. long.

1 shear stays, pulleys, &c., 80 ft. high.

100 fms. 18 in. square main rod.

Strapping plates for ditto, 26 tons.

20 fms. 16 in. square main rod.

1 cast iron balance bob, complete.

No. 1 STEAM WHIM.

ONE 30 in. cylinder double acting WINDING ENGINE, 8 ft. stroke in cylinder,

and 7 ft. without, including ONE 10 ton BOILER, iron cage and fittings.

Steam capstan, with fly wheel, &c.

Stays, rolls, stands, &c., from the capstan to the shears.

17 in. capstan rope, 260 fms. long.

Shaft tackle, pulleys, and stands at Nelson's shaft.

Capstan chain, 1 1/2 tons.

80 IN. ENGINE.

ONE 80 in. cylinder ENGINE, equal beam, 10 ft. stroke, including first piece

of rod.

3 12 tons BOILERS, with fittings.

2 ditto, not used.

1 shears, stays, pulleys, &c., 80 ft. high.

116 in. plunger lift, 45 fms. long.

116 in. plunger lift, 35 fms. long.

1 15 1/2 in. drawing lift, 14 in. long, with buckets and rods.

70 fms. 16 in. square rods.

20 fms. 14 in. square rods.

1 balance bob.

No. 2 STEAM WHIM.

ONE 30 in. cylinder double acting WINDING ENGINE, 8 ft. stroke in cylinder,

and 7 ft. without, including ONE 10 ton BOILER, iron cage, axles, &c.

1 steam capstan, with fly wheels and fittings.

250 fms. 15 in. capstan rope.

Stays, rolls, and stands, from the capstan to the shears.

8 arm cast head capstan.

Shaft tackle, shivers, pulleys, and stand.

THOMAS ENGINE.

ONE 170 in. cylinder PUMPING ENGINE (new), 10 feet stroke in cylinder, and

9 ft. in shaft.

3 12 tons BOILERS, with fittings.

1 iron work for balance bob.

1 shears, stays and pulleys, 70 ft. high.

45 12 ft. 14 in. pumps, imperfect.

7 12 ft. 14 in. pumps, imperfect.

No. 3 STEAM WHIM.

ONE 26 in. cylinder double acting WINDING ENGINE, 6 feet stroke, equal

beam, with ONE 10 tons BOILER, iron cage and axles, also steam capstan, with

fly wheel and fittings.

120 fms. 14 in. capstan rope.

Stays, rolls, stands, &c., from the capstan to the shears.

1 shaft tackle.

1 shivers, pulleys, and stands.

Dry, with tube and fittings.

Wood shed for blacksmiths' shop.

SMITHS' SHOP.

ONE 14 in. horizontal ENGINE, 2 ft. stroke, with ONE 7 tons BOILER, also

driving wheel and shaft overhead, with drum to drive.

Fan machine.

1 steam hammer.

1 screwing machine, with taps and plates.

1 fan machine, with pipes, &c.

3 cranes, with fittings.

6 anvils.

2 pairs of bellows.

2 furnaces, and various other requisites.

CARPENTERS' SHOP.

1 12 ft. plunger pole 18 in., 1 14 ft. working barrel 18 in., 1 stuffing box, 1 crane

winch and chain, 5 vices, 1 large self-acting lathe, 1 small ditto, 1 drilling

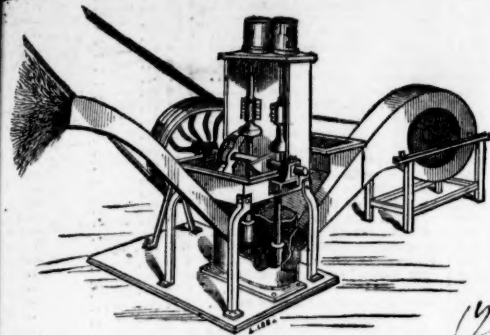
machine, shafting blocks and girders, boring carriage and rail, 1 boring bar, 1 hy-

draulic press, chisels, files, flooring 1 WATER-WHEEL 36 ft. high, 3 ft. breast,

with tooth wheels and pinions; steam hoist,



# CHILDS' PATENT ATMOSPHERIC ORE STAMP AND QUARTZ CRUSHER.



THIS is an IMPROVED STAMP, and will give as many blows per minute as an ordinary 10-stamp mill, and of far greater force, giving effective blow of from 150 to 200 tons per minute, and will crush any known material into an impalpable powder, saving every particle of the product for future use, a result not before obtained by any stamping process. Greater economy is combined than by any other known method. The patentee has had a machine near his office, where he invites (by appointment) experienced practical miners, engineers, chemists, metallurgists, and all others interested, to inspect its results. Every facility will be given for experiments upon different ores, and all other substances to be crushed.

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The principle thus introduced insures the most perfect attainment of the points essential for the safety and stability of the material, at the same time securing the highest effective power. A charge of any given size exerts six times the explosive force of gunpowder. The enormous power confined in a short length at the bottom of the hole allows of a much greater amount of work being placed before each charge, saving considerably in the labour of drilling. Charges are made of every diameter required, the length varying with the diameter. Any number may be placed in a hole. Each charge is fully equal to a fifth of a pound of powder.

PRICES.  
Per case, containing 500 charges of any diameter ..... 35s.  
Per half case, containing 250 charges of any diameter ..... 18s.  
Per quarter case, containing 125 charges of any diameter ..... 9s.  
Terms—cash.  
MANUFACTURED BY  
THOMAS PRENTICE AND CO., 82, GRACECHURCH STREET, LONDON.  
LONDON AGENT—MR. THORNE.

## JOHN AND EDWIN WRIGHT, PATENTERS. (ESTABLISHED 1770.) MANUFACTURERS OF EVERY DESCRIPTION OF IMPROVED

PATENT FLAT AND ROUND WIRE ROPES,  
From the very best quality of charcoal iron and steel wire.  
PATENT FLAT AND ROUND HEMP ROPES.  
RIGGING, SIGNAL AND FENCING STRAND, LIGHTNING CONDUCTORS, STEAM PLOUGH ROPES (made from Webster and Horsfall's patent steel wire), HEMP, FLAX, ENGINE YARN, COTTON WASTE, TARPULING, OIL SHEETS, BRATTICE CLOTHS, &c.  
UNIVERSITY WORKS, MILLWALL, POPLAR, LONDON.  
UNIVERSITY WORKS, GARRISON STREET, BIRMINGHAM.  
No. 2, OSWALD STREET, GLASGOW.  
CITY OFFICE No. 5, LEADENHALL STREET, LONDON, E.C.

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ARNOLD, BIBBY, AND CO.,  
CHAPEL STREET, LIVERPOOL.  
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HEMP ROPE OF SUPERIOR QUALITY, FIFTY PER CENT. STRONGER THAN THIRTY PER CENT. CHEAPER than Russian hemp rope.  
WIRE ROPE OF FIRST QUALITY, and the HIGHEST STANDARD STRENGTH.

THE SEACOMBE FORGE RIVET AND BOLT COMPANY,  
MANUFACTURERS OF  
BOLTS, RIVETS, WASHERS, COACH SCREWS, SPIKES, SET PINS,  
TIE RODS, COTTER PINS, &c.;  
ALSO,  
ENGINEERS' AND SHIPBUILDERS' FORGINGS, SMITHS' WORK, and every description of SHIPS' FASTENINGS.  
WORKS,—SEACOMBE, NEAR BIRKENHEAD.

COAL CUTTING MACHINERY.—  
THE WEST ARDLEY COMPANY, having, by recently patented improvements, perfected their coal cutting machinery, worked by compressed air, are now READY TO MAKE CONTRACTS FOR THE CONSTRUCTION AND USE OF SUCH MACHINES.  
The results of twelve months' experience in the working of these machines, by the West Ardsley Company, have proved most satisfactory, their use being found to CHEAPEN THE COST AND IMPROVE THE AVERAGE SIZE OF THE COAL, to LIGHTEN THE LABOUR, and also to MODIFY THE SANITARY CONDITION OF THE MINE.  
All communications to be made to Messrs. FIATH, DONNISTHORPE, and BOWEN, 8, Britannia-street, Leeds.

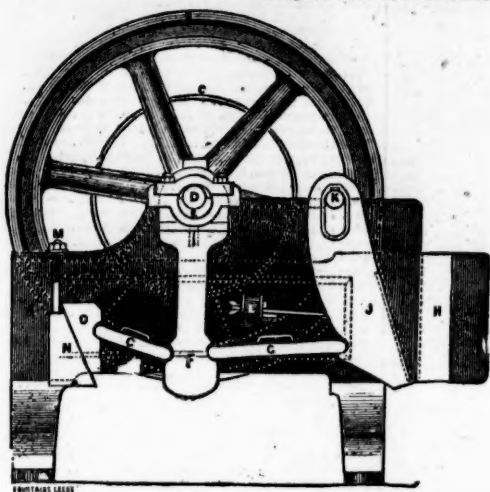
NOTICE.—THE WEST ARDLEY COMPANY, having reason to believe that their patents are being infringed upon, hereby give notice that they will TAKE LEGAL PROCEEDINGS AGAINST ALL PARTIES who may MAKE FOR SALE, or USE ANY MACHINERY in the construction of which any such INFRINGEMENT is MADE.

THE CORNWALL BLASTING POWDER COMPANY,  
ST. ALLEN GUNPOWDER MILLS, TRURO.  
MANUFACTURERS OF PATENT BLASTING POWDER,  
ORDINARY GUNPOWDER, AND WATERPROOF SAFETY  
BLASTING CARTRIDGES.  
THE CORNWALL BLASTING POWDER COMPANY SOLICIT PARTICULAR ATTENTION to their PATENT BLASTING POWDER, which has been fully tested by time, and the growing estimation in which it is held by working men proves its great superiority over ordinary gunpowder. It possesses the following advantages:—  
WEIGHT being about TWENTY-FIVE PER CENT. LESS than ORDINARY GUNPOWDER, and EQUAL in STRENGTH, bulk for bulk, an IMPORTANT SAVING IS EFFECTED ON THE SCORE OF CONSUMPTION. It creates, on explosion, only about ONE-HALF as much SMOKE as ORDINARY GUNPOWDER, and this smoke being of a lighter nature soon passes away, and an IMPORTANT SAVING IS thus EFFECTED ON THE SCORE OF TIME. It is ADAPTED TO ANY CLIMATE, DOES NOT BECOME WASTEFUL BY EXPOSURE to the ATMOSPHERE, IS NOT MORE DANGEROUS in use than ORDINARY GUNPOWDER.  
Testimonials forwarded on application.

nitro-GLYCERINE, OR NOBEL'S PATENT BLASTING OIL.—The EXPLOSIVE FORCE of this BLASTING OIL is TEN TIMES that of GUNPOWDER, and the ECONOMY and SAVING in TIME, LABOUR, and COST in removing granite and hard rock, in sinking shafts, driving tunnels, and opening forward in close ends is immense.  
It will not explode from a spark or fire, but from concussion alone, and is consequently much less dangerous than gunpowder or gun-cotton. Being heavier than water it sinks to the bottom of a wet hole, no other tamper than water being required.  
The charge of this blasting oil, which is now being used with wonderful effect at all the largest slate quarries in North Wales, will displace as much slate rock as four or five charges of gunpowder; and its great force, acting on a large quantity of good slate rock, shakes and displaces it at the natural joints, or cracks, without damaging the slabs nearly so much as the more numerous charges from any other blasting material would do.  
This invaluable quarrying agent may now be obtained from Messrs. WHEAT & CO., Carnarvon, sole consignees from the patentee.

ACCIDENTS WILL HAPPEN!  
Everyone should, therefore, provide against them!  
In case of Death, or £6 per week while laid up by Injury, caused by ACCIDENT OF ANY KIND (riding, driving, hunting, shooting, fishing, &c.), to be secured by an Annual Payment of from £3 to £6 6s. to the RAILWAY PASSENGERS' ASSURANCE COMPANY.  
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WILLIAM J. VIAN, Sec.

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TO MINERS, IRONMASTERS, MANUFACTURING CHEMISTS, RAILWAY COMPANIES, EMERY AND FLINT GRINDERS, MACADAM ROAD MAKERS, &c., &c.  
**BLAKE'S PATENT STONE BREAKER,**  
OR ORE CRUSHING MACHINE,  
FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND MINERALS OF EVERY KIND.  
It is rapidly making its way to all parts of the globe, being now in profitable use in California, Washoe, Lake Superior, Australia, Cuba, Chili, Brazil, and throughout the United States and England. Read extracts of testimonials:—



The Parys Mines Company, Parys Mines, near Bangor, June 6.—We have had one of your stone breakers in use during the last twelve months, and Captain Moreton reports most favourably as to its capabilities of crushing the material to the required size, and its great economy in doing away with manual labour.  
For the Parys Mining Company, JAMES WILLIAMS.  
H. R. Marsden, Esq.  
Edon Emery Works, Manchester.—We have used Blake's patent stone breaker made by you, for the last 12 months, crushing emery, &c., and it has given every satisfaction. Some time after starting the machine a piece of the moveable jaw about 20 lbs. weight, chilled cast-iron, broke off, and was crushed in the jaws of the machine to the size fixed for crushing the emery.  
H. R. Marsden, Esq. THOS. GOLDSWORTHY & SONS.  
Alkali Works, near Wednesbury.—I at first thought the outlay too much for so simple an article, but now think it money well spent. WILLIAM HUNT.  
Welsh Gold Mining Company, Dolgelly.—The stone breaker does its work admirably, crushing the hardest stones and quartz. WM. DANIEL.  
Our 15 by 7 in. machine has broken 4 tons of hard whinstone in 20 minutes, for fine road metal, free from dust. Messrs. ORD and MADDISON, Stone and Lime-Merchants, Darlington.  
Kirkless Hall, near Wigan.—Each of my machines breaks from 100 to 120 tons of limestone or ore per day (10 hours), at a saving of 4d. per ton. JOHN LANCASTER.  
Ovoca, Ireland.—My crusher does its work most satisfactorily. It will break 10 tons of the hardest copper ore stone per hour. WM. G. ROBERTS.  
General Frémont's Mines, California.—The 15 by 7 in. machine effects a saving of the labour of about 30 men, or \$75 per day. The high estimation in which we hold your invention is shown by the fact that Mr. Park has just ordered third machine for this estate. SILAS WILLIAMS.

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SOLE MANUFACTURERS UNDER MORGAN'S PATENT,  
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Some unprincipled manufacturers having made such close imitations of our Trade Mark as cannot fail to deceive the public, we have deemed it advisable to alter our Mark as here shown. It will



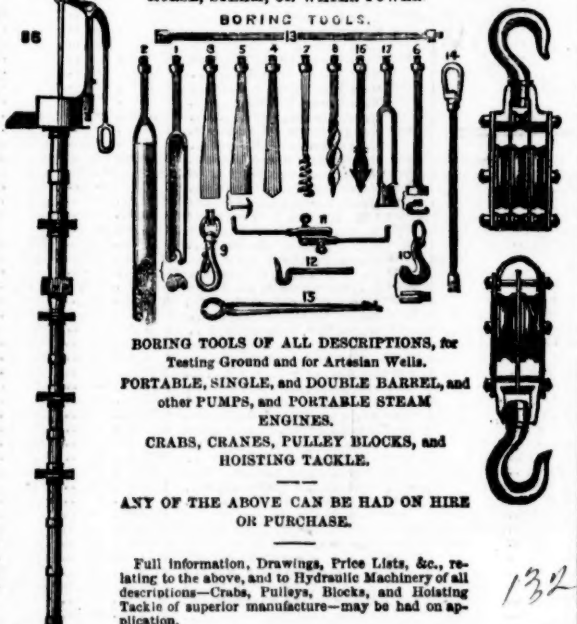
be observed that the alteration consists in the OMISSION of the words—"DEPOTS AT PARIS AND ROTTERDAM," and the ADDITION of the words—"MORGAN'S PATENT."

In all future orders, please specify "MORGAN'S PATENT," and address to  
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**BICKFORD'S PATENT SAFETY FUSE**  
Obtained the PRIZE MEDALS at the ROYAL EXHIBITION of 1851; at the INTERNATIONAL EXHIBITION of 1862, in London; at the IMPERIAL EXHIBITION held in Paris, in 1855; and at the INTERNATIONAL EXHIBITION, in Dublin, 1865.

**BICKFORD, SMITH, AND CO.,**  
of TUCKINGMILL, CORNWALL, MANUFACTURERS OF PATENT SAFETY FUSE, having been informed that the name of their firm has been attached to fuse not of their manufacture, beg to call the attention of the trade and public to the following announcement:—  
EVERY COIL OF FUSE MANUFACTURED by them has TWO SEPARATE THREADS PASSING THROUGH the COLUMN OF GUNPOWDER, and BICKFORD, SMITH, AND CO. CLAIM SUCH TWO SEPARATE THREADS as THEIR TRADE MARK.

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HYDRAULIC AND GENERAL ENGINEERS,  
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**BORING TOOLS OF ALL DESCRIPTIONS, for**  
Testing Ground and for Artesian Wells.  
**PORTABLE, SINGLE, and DOUBLE BARREL, and**  
other PUMPS, and PORTABLE STEAM ENGINES.  
**CRABS, CRANES, PULLEY BLOCKS, and**  
HOISTING TACKLE.  
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**ANY OF THE ABOVE CAN BE HAD ON HIRE**  
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Full information, Drawings, Price Lists, &c., relating to the above, and to Hydraulic Machinery of all descriptions—Crabs, Pulleys, Blocks, and Hoisting Tackle of superior manufacture—may be had on application.

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DOUBLE SHEAR STEEL, FILES MARKED  
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MR. THOMAS GREENER, MINING OFFICE, NORTHGATE, DARLINGTON.  
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N.B.—Medicines and fees superseded.



## THE MINING SHARE LIST.

## BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
500	Alderley Edge, c. Cheshire	10 0 0	—	—	8 12 8	0 5 0	Jan. 1887
200	Botallack, c. St. Just	91 5 0	—	—	488 15 0	0 5 0	May 1886
10000	British Slate Company	10 0 0	—	—	9 per cent.	—	Mar. 1887
4000	Brookwood, c. St. Just	11 0 0	—	—	0 5 0	0 2 6	Sept. 1886
1000	Brookwood, c. St. Just	12 0 0	—	—	8 7 0	0 6 0	Aug. 1886
4000	Cashwell, c. Cumberland	2 10 0	—	—	0 1 6	0 1 6	Aug. 1886
116	Cargill, s. Newlyn	15 5 7	12	—	13 15 0	1 0 0	Feb. 1887
1867	Cwm Erfin, c. Cardiganshire	7 10 0	—	—	22 18 0	1 0 0	Apr. 1887
128	Cwm-y-wydr, c. Cardiganshire	3 9 0	—	—	379 10 0	3 0 0	Apr. 1887
280	Dewent Mines, s. Durham	300 0 0	—	—	169 10 0	2 10 0	Mar. 1887
1024	Devon Gt. Consols, c. Tavistock	1 0 0	400	390 400	1060 0 0	0 6 0	May 1887
358	Dolcoath, c. f. Camborne	128 17 6	—	—	825 10 0	4 0 0	Apr. 1887
6144	East Caradon, c. St. Cleer	2 14 6	5%	5% 5%	14 9 6	0 2 0	Apr. 1887
300	East Darron, c. Cardiganshire	32 0 0	—	—	140 10 0	2 0 0	Mar. 1887
128	East Pool, c. f. Pool, Illogan	24 5 0	—	—	397 10 0	5 0 0	Mar. 1887
5000	East Rosewarne, c. f. Gwennap	2 15 0	—	—	0 10 6	1 6 0	Jan. 1886
1906	East Wheel Lovell, c. Wendron	2 15 0	—	—	2 15 0	7 6 0	Apr. 1887
2800	Frank Mill, c. Christow	25 0 0	—	—	70 0 0	10 0 0	Mar. 1887
5000	Great Laxey, c. f. Isle of Man	3 18 6	—	—	3 5 6	0 5 0	Feb. 1886
5000	Great Laxey, c. f. Isle of Man	4 0 0	18%	17% 18%	6 5 0	10 0 0	Mar. 1887
3908	Great Wheal Vor, c. f. Helston	40 0 0	18%	17% 18%	11 5 6	0 7 6	Mar. 1887
1024	Healdfoot, c. f. near Liskeard	8 10 0	55	34 86	40 10 0	1 10 0	Feb. 1887
6000	Hingston Down, c. f. Helston	5 10 6	—	—	0 10 0	0 5 0	Apr. 1886
400	Liskeard, c. f. Cardiganshire	18 15 0	—	—	489 10 0	3 0 0	Mar. 1887
5000	Marke Valley, c. f. Cardon	4 10 6	—	—	3 14 0	0 2 0	Apr. 1887
3000	Miners' Boundary, c. f. Wrexham	1 0 0	—	—	0 13 0	0 8 0	Mar. 1886
1800	Miners' Boundary, c. f. Wrexham	25 0 0	—	—	212 13 0	4 0 0	May 1887
20000	Mining Co. of Ireland, c. f. d.	7 0 0	18	17 17%	—	—	—
40000	Mynydd Iron Ore	3 5 0	—	—	0 6 6	0 2 6	Mar. 1886
200	Parys Mines, c. Anglesey	50 0 0	—	—	157 10 0	5 0 0	Jan. 1886
6000	Prosper United, c. f. St. Hilary	8 14 0	—	—	0 5 0	0 5 0	Feb. 1887
1120	Providence, c. f. Uney Lelant	10 6 7	31	30 32	82 7 6	0 10 0	Feb. 1887
512	South Caradon, c. St. Cleer	1 8 0	350	340 360	550 10 0	6 0 0	Mar. 1887
6000	South Darron, c. f. St. Just	3 6 6	—	—	0 5 6	0 2 6	June 1886
6000	Tincroft, c. f. Pool, Illogan	9 0 0	15	14 15	18 11 0	0 5 0	Jan. 1887
3000	W. Chiverton, c. f. Perranzabuloe	10 0 0	66	65 67	19 7 6	2 0 0	May 1887
400	West Wheal Seton, c. f. Camborne	47 10 0	140	140 145	470 0 0	3 0 0	Apr. 1887
512	Wheal Bassett, c. f. Illogan	5 2 6	70	67 19	622 0 0	1 0 0	Oct. 1886
1024	Wheal Friendship, c. f. Tavistock	20 0 0	—	—	300 10 0	10 0 0	Nov. 1886
4295	Wheal Killy, c. f. St. Agnes	5 4 6	—	—	3 1 0	0 2 0	Feb. 1887
1024	Wheal Mary Ann, c. f. Menheniot	8 0 0	15	14 15	61 0 0	0 12 6	Mar. 1887
2000	Wheal Rose, c. f. Scorrier	—	—	—	1 0 0	0 10 0	Feb. 1886
386	Wheal Trelawny, c. f. Camborne	58 10 0	115	120 125	241 15 0	2 10 0	Apr. 1887
1040	Wheal Trelawny, c. f. Liskeard	12 0 0	57	60 62	44 10 0	0 8 0	Mar. 1887
17000	Wicklow, c. f. Wicklow	2 10 0	22%	22 22%	46 15 0	1 0 0	Apr. 1887

## FOREIGN DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
5000	Cape Copper Mining	7 0 0	—	—	2 12 6	0 10 0	Apr. 1886
10000	Don Pedro No. del Rey, Brazil	0 14 0	—	—	0 2 2	0 2 0	Mar. 1886
20000	Fortuna, c. f. Spain	2 0 0	2%	—	1 5 4	0 2 0	Oct. 1887
70000	English and Australian	2 10 0	—	—	1 13 0	0 1 0	Feb. 1887
20000	Gen. Mining Assoc., Nova Scotia	20 0 0	—	—	22 0 0	1 0 0	June 1886
10000	Gonnesa, c. f. (5000 £3 pd., 5000 £4 pd.)	3 0 0	—	—	1 5 4	0 2 0	per annum.
5000	Linares, c. f. Spain	3 0 0	—	—	10 per cent.	—	Yearly.
20000	Pestarene, c. f. Spain	2 10 0	—	—	0 2 6	0 2 6	Mar. 1887
50000	Panulillo, c. f. Spain	3 0 0	—	—	10 per cent.	—	Yearly.
10000	Pontgibaud, c. f. France	20 0 0	—	—	4 3 2	1 3 6	Dec. 1886
10000	Port Phillip, c. f. Clunet	1 0 0	—	—	0 16 6	0 1 0	Jan. 1886
120000	Scottish Australian Mining Co.	1 0 0	—	—	7 5 per cent.	—	Mar. 1887
11000	St. John del Rey, Brazil	12 0 0	57	60 62	72 15 0	4 0 0	Dec. 1886
50000	Victoria (London), (5000 £1 pd., 25000 £2 pd.)	1 0 0	—	—	0 0 0	0 1 0	Jan. 1886
40000	West Canada Mining Company	1 0 0	—	—	0 19 6	0 2 6	May 1886

## NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
25000	Alamillos, c. f. Spain	2 0 0	—	—	1 1%	—	Nov. 1886
100000	Anglo-Brazilian, c. f. Brazil	0 10 0	—	—	7 7 6	—	—
20000	Australian, c. f. Australia	7 7 6	—	—	—	—	—
40000	Britannia Silver-Lead Mines, France	18750 186	—	—	—	—	—
2464	Burra Burra, c. f. South Australia	5 0 0	—	—	31%	—	—
25000	Capula, c. f. Mexico	1 12 0	—	—	1 1%	—	Aug. 1886
30000	Chontales, c. f. Nicaragua	3 10 0	—	—	3%	—	Feb. 1887
12000	Cobre Copper Company, c. f. Cuba	43 10 0	—	—	—	—	May 1887
10000	Copiapu Mining Company, Chile	16 10 0	—	—	—	—	—
10000	Copiapu Smelting, Chile	10 0 0	—	—	—	—	Apr. 1886
200	Copper Miners' Co. of South Australia	150 270	—	—	—	—	Nov. 1886
25000	East del Rey, c. f. Brazil	2 15 0	—	—	—	—	June 1886
15000	El Chico Silver Mining and Reduction Company	5 0 0	—	—	—	—	Nov. 1886
8000	English and Canadian Mining Company	8 0 0	—	—	—	—	—
50000	Frontino and Bolivia, c. f. New Granada	1 12 6	—	—	1 1%	—	Sept. 1886
80000	Great Northern, c. f. South Australia	1 11 6	—	—	—	—	—
10000	Great Barrier Land, Mining, &c., New Zealand	8 0 0	—	—	—	—	—
68000	Kapunda Mining Co., Australia	1 0 0	—	—	—	—	—
7927	Lusitanian (Portugal)	2 0 0	—	—	—	—	—
65000	Marquitas, c. f. Chile	0 12 6	—	—	—	—	Jan. 1887
12500	Nerbudda Coal, c. f. India	2 15 0	—	—	—	—	Aug. 1886
50000	Nova Scotia Land and Gold	1 15 0	—	—	4%	—	3% 4
15000	Orea, c. f. New Zealand	2 0 0	—	—	—	—	Sept. 1886
5000	Peel River Land and Mineral	100 0 0	—	—	—	—	—
51000	New Quebrada, c. f. Venezuela	3 10 0	—	—	1	—	—
10178	Rhenish Consolidated, c. f. (5000 £3 pd., 4178 £210s. pd.)	—	—	—	—	—	—
50000	Rossa Grande, c. f. Brazil	0 10 0	—	—	1%	—	Mar. 1887
15000	San Pedro del Monte, c. f. Mexico	4 0 0	—	—	—	—	Sept. 1886
10000	San Roque, c. f. Spain	5 0 0	—	—	—	—	—
1000	Schlossberg Colliery, c. f. Mexico	10 0 0	—	—	—	—	—
43174	United Mexican, c. f. Mexico	28 5 0	—	—	2	—	1% 2
10000	Vancouver, c. f. Canada	0 17 6	—	—	—	—	—
30000	Val Antigua, c. f. Chile	0 17 6	—	—	—	—	—
6000	Val Sassam, c. f. Italy	6 10 0	—	—	—	—	—
50000	Valgodemard Mining Company	20 0 0	—	—	—	—	—
50000	Vallanzasca, c. f. Italy	0 17 6	—	—	—	—	—
45000	Victor Emanuel, c. f. Italy	1 0 0	—	—	—	—	—
20000	Washoe, c. f. Nevada	8 0 0	—	—	—	—	—
80000	Worthing, c. f. South Australia	1 0 0	—	—	—	—	—
75000	Yorke Peninsula, South Australia	1 0 0	—	—	—	—	—
45000	Yudamutana, c. f. S. A.	3 0 0	—	—	—	—	—

## BANKS AND FINANCIAL COMPANIES.

Shares.	Banks.	Paid.	Last Pr.	Bus. done.
40000	Alliance†	25 0 0	15	15% 16%
40000	Australian Mort. Land and Finance†	5 0 0	8	7% 6%
30000	Australasia†	40 0 0	63	6% 6%
10000	Bank of Egypt†	25 0 0	34	33 35
50000	Bank of New Zealand†	10 0 0	19	18 19
25000	Bank of Otago†	10 0 0	6½	5½ 6½
20000	Bank of Victoria, Australia†	25 0 0	38	36 38
20000	British North American†	50 0 0	52	51 53
2915	Canada Company†	32 10 0	71	69 71
50 000	Canadian Loan and Investment†	2 10 0	—	—
40000	Chartered Bank India, Australia, and China†	20 0 0	17½	17½ 18½
30000	Chartered Merc. of India, London and China†	25 0 0	30	30 32
50000	City†	10 0 0	13½	13½ 13½
20000	Colonial†	25 0 0	38	36 38
40000	Company of African Merchants.†	3 0 0	—	2½ 2½
150000	Consolidated Bank†	4 0 0	4½	4½ 4½
50000	ditto	4 0 0	4½	4½ 4½
200000	Credit Foncier and Mobilier of England†	9 0 0	2½	2½ 2½
20000	East London†	5 0 0	—	3½ 3½
30000	English, Scottish, & Aust. Chart.†	20 0 0	18	17 18
20000	English and Swedish†	25 0 0	—	15 17
20000	Imperial Bank†	20 0 0	21	22 23
202500	Imperial Ottoman†	10 0 0	8½	9 9½
150000	International Financial Society†	5 0 0	2½	1½ 2½
300000	International Land Credit†	6 0 0	—	—
50000	London Chartered Bank of Australia†	20 0 0	23½	23 24
87500	London and County†	20 0 0	57	56 57
40000	London Financial Association†	25 0 0	3	8 9
72000	London Joint-Stock†	15 0 0	43	42 43
5000	London and River Plate†	40 0 0	49	49 51
20000	ditto	10 0 0	12½	12 13
20000	ditto	10 0 0	12½	12 13
10000	London and South-Western†	20 0 0	—	18 19
5000	London and Venezuela†	12 10 0	—	—
50000	London and Westminster†	20 0 0	95	94 96
50000	Mercantile and Exchange†	12 10 0	4½	—
10000	Merchant†	25 0 0	16	15 16
5000	ditto	20 0 0	—	8 10
17156	Metropolitan and Provincial†	20 0 0	7½	—
20000	ditto	20 0 0	19½	18½ 19½
20000	National of Australia†	4 0 0	6	5 6
20000	National of Liverpool†	4 0 0	14	12 14
10000	National Provincial of England†	42 0 0	—	—
50000	ditto	12 0 0	—	—
40000	National†	30 0 0	68	61 63
50000	New South Wales†	20 0 0	46	45 45
60000	Oriental Bank Corporation†	25 0 0	44	43 44
272 0	Provincial Banking Corporation†	10 0 0	4	3½ 4½
28000	Provincial of Ireland†	25 0 0	85	84 86
10000	ditto	10 0 0	—	—
40000	Union of Australia†	25 0 0	48	46 48
10000	Union of Ireland†	22 0 0	15	13 15
80000	Union of London†	15 0 0	40	40 41